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UNIVERSITY OF CALIFORNIA PUBLICATIONS

PUBLICATIONS

OF THE

LICK OBSERVATORY

PRINTED BY AUTHORITY OF THE REGENTS OF THE UNIVERSITY

VOLUME VI

SACRAMENTO

W. W. SHANNON, ... SUPERINTENDENT STATE PRINTING

1903

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ORGANIZATION OF THE LICK OBSERVATORY.

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Committee of the Regents for the Lick Observatory.

BENJAMIN IDE WHEELER, - - - - - *President of the University.*

W. W. CAMPBELL, - - - - - - - *Director and Astronomer,*

R. H. TUCKER, - - - - - - - - - - *Astronomer,*

W. J. HUSSEY, - - - - - - - - - - - *Astronomer,*

W. H. WRIGHT, - - - - - - - - - *Acting Astronomer,*

C. D. PERRINE, - - - - - - - - - *Assistant Astronomer,*

R. G. AITKEN, - - - - - - - - *Assistant Astronomer,*

H. D. CURTIS, - - - - - - - - - - - *Assistant,*

H. K. PALMER, - - - - - - - - - - - *Assistant,*

ELLIOT SMITH, - - - - - - - - - - - *Assistant,*

J. H. MOORE, - - - - - - - - - - - *Assistant,*

R. H. CURTISS, - - - - - - - - - - - - *Fellow,*

SEBASTIAN ALBRECHT, - - - - - - - - - - *Fellow,*

J. D. MADDRILL, - - - - - - - - - - - *Fellow,*

W. CURTIS, - - - - - - - - - - - - *Secretary.*

MERIDIAN CIRCLE OBSERVATIONS

MADE AT

THE LICK OBSERVATORY,

UNIVERSITY OF CALIFORNIA,

1896-1901.

BY

R. H. TUCKER,

ASTRONOMER IN THE LICK OBSERVATORY.

PREFACE.

The results contained in this volume of Meridian Circle work are derived from observations made during the period, August, 1896, to March, 1901.

They include the following separate schemes of work:

The Declinations of the Bethlehem Latitude Stars;
Additional Standard Close Circumpolar Stars;
Zodiacal Stars for Heliometer Measures of the Major Planets;
The Southern Stars of the Catalogue of Piazzi;
The Reference Stars for the Photographs of Eros;
Miscellaneous observations, including those of Eros, Nova Persei, comets, and comparison stars.

In all there are included about 11,700 full observations, and 2700 observations in one coördinate only, for the determination of 4500 stars.

Sufficient description of the Meridian Circle, and of the methods of observing, has been given in Volume IV of the Publications of this Observatory. Each of the separate pieces of work, in this volume, will be described in a brief introduction.

This Meridian Circle work was carried out under the successive administrations of Directors E. S. HOLDEN, J. E. KEELER, and W. W. CAMPBELL, all of whom gave it cordial support and encouragement.

RICHARD H. TUCKER.

Lick Observatory, May, 1902.

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THE DECLINATIONS OF THE BETHLEHEM LATITUDE STARS.

(1) **The List.** This list contains the stars observed for Latitude, at South Bethlehem, Pa., by Professor C. L. DOOLITTLE. The original list included 347 stars, of which 345 have been observed here. Three stars, from a later list, have also been observed, and are numbered 348–350.

The list included 96 stars, from the Standard Declination Catalogue of LEWIS BOSS, of which 94 have been observed.* Also 13 extra stars have been taken from the same catalogue, to fill intervals, where there were not sufficient reference stars. These are numbered 351–363, in the final list.

The total number of stars observed is 361, of which 107 are contained in the Standard Catalogue.

Each star has been given two determinations, in each position of the instrument, fixed circle East and West; and the stars above 70° Declination, of which there are 42, have been similarly observed at both culminations, with three exceptions. Some of the Fundamental stars have been included in two adjoining programs, thus doubling the number of observations.

Including Nadirs, and determinations of flexure and bisection error, 2100 observations have been made in this series, upon sixty-two nights. They are included in the period, August 7, 1896, to June 3, 1897, the mean epoch being very closely that of reduction, 1897.0.

For 1200 observations, upon thirty-one nights, Professor R. G. AITKEN, Assistant Astronomer in the Observatory, read the circle microscopes. His previous experience, in division error readings, insured the high efficiency of his service, and his share in the work is gratefully acknowledged.

The reduction and discussion of these observations were completed in 1897, and the material prepared for publication, substantially as it appears in the following pages. The observed places were sent to Professor DOOLITTLE at the time the list was reduced. Subsequently, early in 1898, the observed places were compared with the places derived by Professor DOOLITTLE, and the results of this comparison have been included.

Mr. E. F. CODDINGTON, then holding a Fellowship at the Observatory, assisted most satisfactorily in the reduction of these observations, principally in the computation of the refractions, and in apparent to mean place reduction.

(2) **The Fundamental System.** The fundamental stars, used for the reduction of the Declinations of this list, have been taken from the catalogue of LEWIS BOSS: *Declination of Fixed Stars. U. S. Northern Boundary Commission: 1879.*

*The stars B. No. 355 and 401 have not been observed.

No distinction has been made between the stars, adopted for the formation of the Normal System of the above catalogue, and those which were reduced to that system, primarily for the latitude work of the Northern Boundary.

It was recognized, at the time of the reduction of these observations, that there is considerable difference in the precision of the places of the various stars of the catalogue, indicated by the weights assigned to each. But for the purpose of precision in these reductions, it was desirable to include a large number of reference stars, larger than could have been obtained by the retention of only the best determined stars of the catalogue. The employment of a large proportion of reference stars has been considered to compensate largely for the lack of precision in many of the individual star places, as compared with those of the Normal System.

The effect of errors of observation, in the determination of the reduction constants, is sensibly diminished by the use of a relatively large number of stars. The Latitude list extends from below the Equator to very near the Pole, and the entire range is to be represented in the determination of the reduction constants. This is required, not only that the Fundamental System may be reproduced in the results of observation, but in order to satisfactorily discuss the systematic errors.

In the observing, sufficient fundamentals have been included to furnish satisfactory determinations of reference points. The number varies, with the number of stars in the respective programs, from 6 to 16, and is on the average 12, or above thirty per cent of the total number of stars observed each night. This proportion is rarely attained in work which may be classed as differential.

In reference to the choice of this system of Declinations, it was Professor DOOLITTLE'S original intention to use the system of BOSS in his Latitude work, and to reduce all stars to that system. This series of observations has been planned, to fulfill such purpose, by the medium of direct observation. The Declinations of the catalogue would undoubtedly have been adopted as precise enough for zenith telescope work. The extra stars are to be brought into conformity with the catalogue stars, as nearly as possible. The original Latitude list appeared to contain enough stars from the Standard Catalogue, to reduce, and to test the observations. Conversely, the Declinations of the catalogue are brought individually into comparison with the system, as nearly as results based upon such a proportion of the stars as has been used, can furnish a comparison.

The Bethlehem Latitude Results have since been transformed, to depend upon the system of Doctor AUWERS.

TABLE I. This gives the Declinations from BOSS, reduced to 1897.0, brought forward by means of precession, and the proper motions of his catalogue.* No proper motions have been adopted for the remaining stars, in these reductions.

Corrigenda for Boss, 500.

No. 8. $0^h\ 27^m$, Precess. +19″.9262, p. m. −0″.0077. An. Var. 19″.9185, in place of 19″.9227.

No. 87. $4^h\ 22^m$ in place of No. 67 Decl. page.

No. 251. $15^h\ 49^m$, Precess. −10″.8960, p. m. +0″.6159. An. Var. 10″.2801, in place of 10″.2901.

The first column gives the number from Boss. There follow the observed correction to the catalogue; and the Declination of the Berliner Jahrbuch, with the corresponding difference. This affords a direct comparison of the two systems, for which the result can be briefly summarized.

Including 68 stars, common to both, the mean difference is:

$$\text{Boss} - \text{B. J.} = -0''.02 \text{ at mean Decl. } 41°.4.$$

The average difference is $\pm 0''.30$, and there are three differences of $1''$, or over. Assigning the same weight to each, the probable error of either catalogue would be $\pm 0''.19$. Two stars from Boss, included in this list, have not been employed as fundamentals, on account of the discordance with observation, and their declinations have not been included in the subsequent discussion.

The observed places of the fundamentals have been derived by the same process of reduction as for the other stars. Owing to the comparatively large number observed each night, the determination of the Declination is but slightly influenced by the use of the star itself as a standard. The average effect has been to decrease the differences, Obs.—Boss, by about eight per cent of the independent values.

The Latitudes derived from each star, and the same corrected for Variation, are included in the table.

TABLE I.

FUNDAMENTAL DECLINATIONS. 1897.0. BOSS 500.

No.	R. A.	Decl. Boss.	Pr. Mo.	Obs. – B.	φ	φ_0	B. J.	Obs. – B. J.	Δ
	h m s	° ′ ″	″	″	″	″	″	″	″
8	0 27 8	62 21 47.73	−0.008	+0.02	25.49	25.72	47.27	+0.48	+0.46
15	38 50	74 25 30.30	− .021	−0.47	25.48	25.45	29.88	−0.05	+0.42
22	51 2	37 56 25.39	+ .007	+1.02	24.44	24.67	26.73	−0.32	−1.34
28	1 21 18	88 45 30.21	.000	+0.02	25.54	25.52	30.28	−0.05	−0.07
32	23 33	69 44 3.94	− .076	+0.01	25.40	25.63	. . .	. . .	. . .
45	55 22	63 53 34.25	+ .013	−1.34	26.78	27.01	. . .	. . .	. . .
48	2 3 24	34 30 0.01	− .050	+0.18	25.26	25.29	0.15	+0.04	−0.14
50	20 34	66 56 21.11	+ .005	+0.09	25.27	25.30	20.99	+0.21	+0.12
58	43 55	26 50 9.03	− .119	+0.03	25.33	25.36	9.07	−0.01	−0.04
65	3 1 27	40 33 31.14	− .012	+0.16	25.20	25.23	31.44	−0.14	−0.30
72	21 35	9 22 24.04	− .056	+0.69	24.67	24.70	23.81	+0.92	+0.23
85	4 7 19	48 8 50.59	− .032	+0.09	25.25	25.28	. . .	. . .	. . .
86	13 55	15 22 43.67	− .027	−0.34	25.77	25.80	43.08	+0.25	+0.59
87	22 36	18 57 6.48	− .045	−0.32	25.80	25.83	6.55	−0.39	−0.07
89	39 25	56 34 26.39	− .151	−0.12	25.46	25.49	26.20	+0.07	+0.19
92	54 15	60 17 29.24	− .013	−0.06	25.53	25.56	29.12	+0.06	+0.12
100	5 25 57	74 58 30.90	+ .019	+0.06	25.58	25.51	29.90	+1.06	+1.00
103	30 59	−1 16 4.17	.000	−0.34	25.81	25.84	−4.14	−0.37	−0.03
107	49 35	7 23 15.66	+ .007	−0.06	25.54	25.57	15.99	−0.39	−0.33
112	6 8 39	22 32 11.44	− .016	−0.06	25.51	25.33	11.68	−0.30	−0.24
113	16 43	22 33 58.36	− .122	+0.28	25.34	25.16	59.00	−0.36	−0.64
116	37 35	25 13 58.66	− .015	−0.25	25.87	25.69	58.77	−0.36	−0.11
118	46 0	34 5 6.81	− .049	−0.30	25.73	25.55	7.48	−0.97	−0.67
117	52 15	87 12 34.16	− .039	+0.28	25.24	25.06	34.09	+0.35	+0.07
123	7 13 58	22 10 18.51	− .016	+0.06	25.56	25.38	19.02	−0.45	−0.51
124	20 10	68 40 33.17	− .037	−0.48	26.01	25.83	32.07	+0.62	+1.10
128	38 13	24 38 41.08	− .063	+0.07	25.45	25.27	41.33	−0.18	−0.25
135	8 21 42	61 3 43.82	− .123	+0.63	24.89	24.71	44.43	+0.02	−0.61
136	38 50	18 31 58.06	− .236	−0.26	25.88	25.70	58.22	−0.42	−0.16
140	56 35	47 33 49.34	− .067	+0.31	25.12	24.94	49.22	+0.43	+0.12

No.	R. A.	Decl. Boss.	Pr. Mo.	Obs. – B.	φ	φ_0	B. J.	Obs. – B. J.	Δ
	h m s	° ′ ″	″	″	″	″	″	″	″
144	9 14 46	34 49 40.79	+0.015	−0.25	25.86	25.68	40.87	−0.33	−0.08
146	22 24	81 46 53.53	− .018	−0.15	25.14	25.37	53.57	−0.19	−0.04
153	46 54	26 29 31.27	− .053	−0.36	25.79	25.61	31.27	−0.36	.00
154	10 1 43	17 15 53.36	− .008	−0.20	25.72	25.54	53.42	−0.26	−0.06
156	10 33	65 37 18.95	− .025	+0.24	25.29	25.11	. . .	. . .	. . .
157	10 53	43 25 43.18	− .043	−0.02	25.70	25.42	42.61	+0.55	+0.57
163	43 50	11 5 24.57	− .029	−0.05	25.74	25.46	24.55	−0.03	+0.02
165	57 22	62 18 25.40	− .067	+0.04	25.66	25.38	25.41	+0.03	−0.01
168	11 8 50	15 59 33.36	− .077	−0.60	26.30	26.02	33.51	−0.75	−0.15
172	25 17	69 53 58.25	− .021	−0.06	25.67	25.39	58.33	−0.14	−0.08
173	31 40	−0 15 18.63	+ .035	−0.14	25.74	25.46	−18.32	−0.45	−0.31
180	12 10 19	57 36 17.71	+ .009	−0.07	25.77	25.49	17.42	+0.22	+0.29
185	25 36	69 46 18.20	− .065	+0.58	25.08	24.80	. . .	. . .	. . .
187	29 5	70 21 21.23	+ .005	−0.07	25.42	25.39	21.24	−0.08	−0.01
189	48 22	83 58 21.60	+ .013	+0.28	25.49	25.47	. . .	. . .	. . .
195	13 9 2	40 41 54.25	+ .016	−0.86	26.43	26.15	. .	. . .	. . .
207	50 29	79 30 13.85	− .009	+0.82	25.45	25.43	. . .	. . .	. . .
209	56 30	27 53 2.27	+ .001	+0.16	25.40	25.12	2.81	−0.38	−0.54
216	14 25 2	50 18 20.98	− .047	−0.36	25.99	25.82	. . .	. . .	. . .
217	27 23	30 49 24.44	+ .113	+0.29	——	——	24.74	−0.01	−0.30
223	40 29	27 30 30.11	+ .010	+0.49	25.07	24.90	. . .	. . .	. . .
229	58 3	40 47 48.14	− .045	+0.59	25.03	24.86	48.48	+0.25	−0.34
230	15 0 23	48 3 19.89	+ .041	−0.53	26.09	25.92	. . .	. . .	. . .
235	20 36	37 44 18.37	+ .088	−0.46	26.09	25.92	17.82	+0.09	+0.55
239	25 48	61 1 31.60	− .013	+0.62	25.01	24.84	. .	. . .	. . .
244	31 38	43 30 30.90	+ .043	−0.09	25.65	25.48	. . .	. . .	. . .
252	47 44	78 6 40.70	− .002	−0.05	25.54	25.47	40.77	−0.12	−0.07
251	49 6	42 44 22.53	+ .616	+0.60	24.96	24.79	. . .	. . .	. . .
267	16 17 22	19 23 42.64	+ .053	−0.76	26.35	26.18	42.04	−0.16	+0.60
272	22 36	61 44 50.15	+ .055	+0.57	25.06	24.89	49.93	+0.79	+0.22
273	25 15	42 6 30.35	+ .003	−0.53	26.16	25.99	. . .	. . .	. . .
280	33 10	46 49 18.45	+ .012	−0.37	25.93	25.76	. . .	. . .	. . .
281	35 57	49 7 46.77	+ .021	+0.29	25.34	25.17	. . .	. . .	. . .
284	39 21	39 7 5.21	− .090	−0.06	25.62	25.45	5.60	−0.45	−0.39
288	44 45	55 35 31.46	− .022	+1.03	24.53	24.36	. . .	. . .	. . .
289	49 3	31 52 19.70	− .022	+0.02	25.61	25.44	. . .	. . .	. . .
294	56 31	82 12 23.96	− .003	+0.10	25.25	25.17	24.16	−0.10	−0.20
297	17 5 49	55 53 56.04	+ .039	−0.40	26.02	25.85	. . .	. . .	. . .
303	18 20	40 4 32.56	− .070	+0.09	25.53	25.36	. . .	. . .	. . .
306	24 0	48 20 46.77	− .016	+0.03	25.60	25.43	46.43	+0.37	+0.34
309	30 9	12 38 5.97	− .237	+0.19	25.43	25.26	6.15	+0.01	−0.18
311	37 33	68 48 19.85	+ .324	−0.10	25.66	25.49	19.53	+0.22	+0.32
318	51 44	56 53 19.59	+ .071	0.00	25.56	25.39	19.48	+0.11	+0.11
321	54 3	76 58 35.12	+ .243	−0.36	25.43	25.36	34.80	−0.04	+0.32
326	18 7 45	79 59 13.89	+ .119	+0.29	25.29	25.31	. . .	. . .	. . .
335	26 16	59 28 49.82	+ .034	−0.47	25.49	25.72	. . .	. . .	. . .
340	41 13	20 26 51.58	− .347	+0.16	24.90	25.13	51.30	+0.44	+0.28
342	44 50	49 19 5.03	+ .028	−2.56*	——	——	. . .	. . .	. . .
347	52 4	48 43 50.51	− .120	−0.60	25.76	25.99	. . .	. . .	. . .
349	55 5	32 32 53.28	− .014	+0.23	24.79	25.02	53.88	−0.37	−0.60
351	19 0 40	13 42 37.23	− .103	−0.27	25.38	25.61	37.19	−0.23	+0.04
356	12 32	67 28 49.22	+ .085	−0.20	25.50	25.73	49.08	−0.06	+0.16
365	27 6	51 30 37.04	+ .124	−0.18	25.31	25.54	36.79	+0.07	+0 25
378	48 31	70 0 20.21	+ .027	−0.58	24.94	24.96	19.86	−0.23	+0.35
377	49 5	47 39 56.12	− .019	+0.53	24.50	24.73	. . .	. . .	. . .
386	20 9 53	61 45 59.89	+ .078	−0.07	25.21	25.44	. . .	. . .	. . .
395	25 24	36 6 38.86	− .009	+0.03	24.97	25.20	. . .	. . .	. . .
404	37 55	44 54 43.73	− .008	+0.26	24.77	25.00	44.00	−0.01	−0.27
408	42 42	5 37 47.15	− .008	+0.17	24.83	25.06	. . .	. . .	. . .
420	21 9 10	59 33 46.35	− .009	−0.08	25.20	25.43	46.19	+0.08	+0.16

*Not used as Fundamental.

No.	R. A.	Decl. Boss.	Pr. Mo.	Obs. – B.	φ	φ_0	B. J.	Obs. – B. J.	Δ
	h m s	° ′ ″	″	″	″	″	″	″	″
421	21 10 40	4 49 19.32	−0.087	−0.53	25.56	25.79	19.21	−0.42	+0.11
428	21 34	36 13 20.03	− .025	+0.24	24.76	24.99	. . .	. . .	. . .
438	39 7	9 24 9.83	− .006	−0.32	25.36	25.59	9.97	−0.46	−0.14
440	39 58	25 10 16.95	− .011	+0.37	24.60	24.83	17.45	−0.13	−0.50
449	58 30	42 19 3.67	+ .033	−2.59*	——	——	. . .	. . .	. . .
453	22 2 13	24 50 30.68	+ .006	+0.47	24.79	25.02	30.78	+0.37	−0.10
457	9 27	39 12 13.41	− .011	+0.56	24.95	25.18	. . .	. . .	. . .
463	20 20	48 57 13.46	− .029	+1.22	24.24	24.47	. . .	. . .	. . .
464	25 19	32 2 43.54	− .019	−0.18	25.68	25.91	. . .	. . .	. . .
469	31 36	49 32 15.45	+ .018	−1.10	26.56	26.79	. . .	. . .	. . .
475	45 42	41 24 28.79	− .010	−0.29	25.70	25.93	. . .	. . .	. . .
480	57 9	56 33 6.64	− .019	+0.66	24.75	24.98	. . .	. . .	. . .
482	59 37	14 39 3.59	− .050	−0.13	25.63	25.86	3.95	−0.49	−0.36
485	23 8 19	56 35 57.44	+ .269	+1.33	24.09	24.32	58.27	+0.50	−0.83
491	33 5	42 41 52.16	− .005	−0.05	25.51	25.74	51.66	+0.45	+0.50
496	49 49	73 50 13.53	− .009	−0.45	25.25	24.97	. . .	. . .	. . .
497	52 30	24 34 7.64	− .044	+0.43	24.98	25.21	. . .	. . .	. . .

* Not used as Fundamental.

The differences of the two systems, BOSS and AUWERS, are combined below to present the evidence of any systematic variation. In Table II, of Right Ascension groups, all the differences have been included. There appears to be a tendency toward six-hour groups, as combined at the foot of the table, but the individual variations are largely accidental in character.

In Table III, of Declination groups, the first group includes the South stars. Three differences of 1″, or above, have been omitted, as indicated in the table. From the group residuals, the expression at the foot of the table has been derived, representing the differences with a slightly smaller mean residual, for the mean of the groups.

TABLES II AND III.

COMPARISON OF BOSS AND B. J. 1897.0.

II. 2-HOUR GROUPS.

R. A.	No.	Decl.	B. – B. J.	v
h		°	″	″
0.8	4	66	−0.13	−0.10
2.7	5	34	− .03	.00
5.0	7	33	+ .21	+ .24
6.9	8	38	− .16	− .13
9.0	6	45	− .13	− .10
10.8	7	31	.00	+ .03
12.9	3	52	− .09	− .06
15.4	3	52	+ .05	+ .08
17.2	9	52	+ .13	+ .16
19.2	6	42	+ .08	+ .11
21.2	5	29	− .13	− .10
22.9	4	35	− .20	− .17
Total,	67	Mean,	−0.03	±0.11

6-HOUR GROUPS.

h		°	″
5	20	35	+0.01
11	16	43	− .07
17	18	49	+ .10
23	13	43	− .15

III. 10° GROUPS.

R. A.	No.	Decl.	B. – B. J.		v
h		°	″		″
11.5	6	+4.9	−0.08		−0.06
12.5	10	15.8	+ .03		+ .05
12.1	11	24.4	− .24		− .22
10.0	6	35.8	− .22	[−1.34]	− .20
14.1	7	44.0	+ .09		+ .11
16.4	6	56.5	+ .03		+ .05
9.9	9	65.0	+ .08	[+1.10]	+ .10
12.0	5	74.1	+ .20	[+1.00]	+ .22
8.6	4	85.0	− .06		− .04
Total,	64	Mean,	−0.02		±0.11

$$(\text{Boss} - \text{B. J.}) = -0''.10 + 0''.002\ \delta^\circ$$

Employing this expression, the group residual $v = \pm 0''.09$.

A more complete comparison of the two systems is afforded by taking all of the stars observed, which occur in either catalogue, thus including some independent evidence, based upon the medium of observation. Since the observing was done in programs of four hours' duration, systematic variation with respect to Right Ascension can not be derived from the observed differences. These have been combined in groups of 10 degrees, for each authority, the first group including two stars south of the Equator.

In Table IV there are 101 stars from BOSS, omitting the two differences which exceed 2″, and three stars observed at one culmination only. The differences are given separately for the two culminations of the Circumpolar stars, and following, for the mean of both culminations.

In Table V, 86 stars from AUWERS B. J. are treated in the same manner.

TABLES IV AND V.

IV. Obs. – Boss. 10° Groups.				V. Obs. – B. J. 10° Groups.			
R. A.	No.	Decl.	Obs. – B.	R. A.	No.	Decl.	Obs. – B. J.
h		°	″	h		°	″
12.9	7	+4.7	−0.07	10.3	9	+6.0	−0.08
12.5	10	15.7	− .27	13.3	13	15.0	− .26
12.4	13	24.7	+ .14	11.7	12	24.4	− .15
14.4	12	35.5	+ .09	12.4	10	35.5	− .25
16.0	21	45.1	− .01	13.9	10	43.8	+ .24
17.1	11	56.1	+ .12	16.1	8	56.8	+ .14
10.0	16	65.2	+ .03	10.7	14	65.1	+ .13
13.0	8	75.5	.00	12.8	8	74.9	+ .10
10.4	3	85.0	+ .20	9.2	2	85.5	+ .05
10.4	3	95.0	+ .07	9.2	2	94.5	− .19
13.0	8	104.5	− .09	12.8	8	105.1	+ .05
		Mean of 11 groups,	+0.02			Mean of 11 groups,	−0.02
		Circumpolars: mean.				*Circumpolars: mean.*	
h		°	″	h		°	″
13.0	8	75.5	−0.04	12.8	8	74.9	+0.08
10.4	3	85.0	+0.13	9.2	2	85.5	−0.07
		Mean of 9 groups,	+0.01			Mean of 9 groups,	−0.02
Total, 101				Total, 86			

In the above comparisons there are included 120 stars, of which 67 are common to both catalogues. The resulting differences are represented by the following expressions, deduced rigorously from the group residuals:

$$\text{Obs.} - \text{Boss} = -0''.08 + 0''.002\ \delta^\circ$$

$$\text{Obs.} - \text{B. J.} = -0.16 + 0.003\ \delta^\circ$$

Subtracting one from the other, there results:

$$\text{Boss} - \text{B. J.} = -0''.08 + 0''.001\ \delta^\circ$$

which expression is similar to that derived in Table III, from the smaller number of stars common to both catalogues.

The probable error of a difference, (Obs. – Boss), is ± 0″.30 from 104 stars. There are six differences of 1″ or greater, besides two omitted greater than 2″. Deducting the probable error of observation, the probable error of a catalogue Declination is ± 0″.26 for one star.

The probable error of a difference, (Obs. – B. J.), is ± 0″.28 from 86 stars. There are two differences of 1″ or greater. The corresponding probable error of B. J. is ± 0″.24, for one star.

The Declinations of the American Ephemeris are identical with those of Boss, for the greater part of the stars common to both.* The same proper motion has not been employed for Polaris, however, and the Declinations now differ by 0″.1.

(3) **Systematic Errors.** The general conformity of the observed places, with the system of Boss, will be apparent from the comparisons tabulated above, in which the Declinations extend from the Equator to the Pole, and which contain the additional evidence derived from the B. J. places.

The Poulkova Refractions have been employed in the reductions. The agreement of the observed latitudes, from the entire list of Fundamentals, with those from North stars observed at both culminations, indicates that the refraction corrections are in accord with the Declination system, for this range of zenith distance. There are eleven Fundamental stars above 70° observed at both culminations. For these the observed difference, φ U. C. – φ L. C., is – 0″.01. When the separate results are corrected for the Latitude variation, the difference, φ_0 U. C. – φ_0 L. C., is – 0″.02.

The mean values, from the Circumpolar stars, to which reference will be made later, are: $\varphi = 37° 20' 25''.40$; $\varphi_0 = 25''.37$.

From observations of the entire list of Fundamentals there result the mean values: $\varphi = 25''.42$ and $\varphi_0 = 25''.40$, from individual stars. The probable error of a Latitude from one star is ± 0″.30. Taking the direct mean of the results, by nights, $\varphi = 25''.42$ and φ_0 25″.42.

In this connection reference may be made to the systematic error of Latitude determinations, due to the division error of the circle reading at the Nadir. The determinations made circle East, and West, will differ systematically by double the graduation error of the Nadir reading; aside from the effect of graduation errors in the circle readings upon the stars, which may be assumed to be accidental in character. For this series, the observed mean value is: $\Delta\varphi$ (E – W) = + 0″.20 (± 0″.02) for 117 determinations, the lower culminations being counted separately.

A special series of measures, for the divisions invariably employed for the

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*The note at the foot of page 523, A. E. 1897, is liable to be misunderstood, in this connection. It is stated that the mean Declinations are taken from Boss, for all stars found therein. Yet a number of the "additional stars," marked with an asterisk in A. E., are found in Boss, while evidently his places have not been used. For seven stars thus marked, five differ from Boss by over 0″.5, and two differences exceed 1″.

Nadir readings, was made in June, 1896, after the close of the measurement of the 1° arcs. The value of the correction for graduation then measured, — 0″.27, has the same sign as the correction indicated above, but is more than twice as large.

The Flexure has been determined on eleven occasions, during this series, distributed six circle East, and five circle West. The mean value of the semi-horizontal flexure is, $f = -0''.05$. Assuming that no change has taken place in the flexure, during the series, the probable error of a single determination is $\pm 0''.09$; and the probable error of the mean value would be $\pm 0''.03$.

The correction for flexure, thus obtained, will have the same sign as the refraction correction, increasing the observed zenith distances. The effect upon the Declinations would be to increase those North of the zenith at U. C., and to decrease the plus Declinations South of the zenith.

The sign of the correction is contrary to that determined during the preceding three years of observations:

(25 determinations: $f = +0''.09 \pm 0''.02$),

but is confirmed by determinations, subsequent to the close of this series.

No correction for flexure has been applied in the reduction of these observations.

The effect of Bisection Error has been determined, as in previous years, by observing pairs of stars at the zenith, facing North and South alternately, and reversing the order on alternate nights. One determination consists of four observations, equivalent to a pair of stars observed upon two nights. The observations are included in the three groups following:

Epoch.	No.	$\frac{\Delta\varphi}{2}$
1896.4	8	+ 0″.03
1896.5	8	— 0 .02
1897.4	7	+ 0 .10

If treated as one series, the mean value would be + 0″.03, the probable error of a single determination would be ± 0″.13, and of the mean ±0″.03. The effect of the correction would be to decrease observed zenith distances, contrary to the flexure correction, and contrary to the refraction correction. No correction for bisection error has been applied.

The comparison of the Declinations, determined at upper and lower culminations, affords a test of the systematic errors, independent of the observed corrections for flexure and bisection, which have preceded. The existence of systematic difference, in the observations at the two culminations, may be due in part to these sources of error.

There are 39 stars observed at both culminations. Rejecting one difference, (+ 1″.25), the mean value from 38 stars is: Δ (U. C. — L. C.) = + 0″.12 ± 0″.04. The effect of the correction, 0″.06, thus derived, would be to decrease observed zenith distances. The probable error of a single difference is ± 0″.22. The resulting probable error of a Declination, observed at both culminations, is ± 0″.11.

The difference, U. C. — L. C., may be due in part to systematic differences in the Fundamental stars, varying with the Right Ascension. The following tabulation, by groups of four hours, corresponding to the programs as observed, will make plain the existence of a systematic variation:

TABLE VI.

R. A.	Mean.	No.	Δ (U. C. – L. C.)
h h	h		s
2 – 5	4	5	0.00
6 – 9	8	4	–0.10
10 – 13	12	9	+0.10
14 – 17	16	8	+0.24
18 – 21	20	7	+0.21
22 – 1	0	5	+0.17
	Sum,	38	
	Mean by groups,		+0.10

The following combination, by groups of twelve hours, is more decided in indication of the variation:

$2^h - 13^h$	8^h	18	0″.00
14 – 1	20	20	+0 .21

The correction thus derived has not been applied. If constant, it will be eliminated from the mean of observations of both culminations. For two stars, observed at L. C. only, the correction + 0″.06 is possibly required; and for one star, observed at U. C. only, the correction — 0″.06.

To recapitulate: There are the following possible sources of systematic error in the observed Declinations of this list, for which corrections have not been applied:

Observed Flexure:	0″.05 sin Z. D.	Correction increases obs. Z. D.
Observed Bisection:	0 .03	" decreases " "
Observed $\Delta \frac{\text{U. C.} - \text{L. C.}}{2}$	= 0 .06	" decreases " "

This last probably due to systematic differences in the Fundamental stars, varying with the Right Ascension.

(4) **Accidental Errors.** The probable error of a single determination of Declination has been obtained by comparison of the two observations, made in the

same position of the instrument. The discussion has been comprehensive, and but three pairs, with their residuals, have been rejected from a total of nearly 1800 observations.

The effect of graduation error is not included. And the results do not include the errors of the places of the fundamental stars, though the error of observation of these forms part of the final value. The probable error of a single observation, thus derived, is $\pm 0''.184$.

The probable error of the Mean Declination has been obtained, by the comparison of the observations made in the two positions of the instrument, fixed circle East and West, and will thus include the effect of graduation error. But one residual, out of 400, counting the lower culminations separately, has been rejected. The probable error, for the mean of both positions, is $\pm 0''.123$.

A comparison of the probable errors, for the mean of two observations, derived by the two methods, leaves $\pm 0''.11$ for the probable error of graduation. This is for the mean of two divisions, read under each microscope. From the actual measurement of the 1° arcs, the probable error of graduation for one reading of the circle, one division under each microscope, was found to be $\pm 0''.15$. Thus it would appear that by reading upon two adjoining divisions, the usual practice in observing here, the effect of graduation error is decreased nearly in the degree to be expected from the existence of purely accidental errors.

In general, these mean results show about the same degree of precision as reached in the earlier work of Volume IV, which contained eight observations, with transits. It is possible that sharper determinations of zenith distance may be made, when the attention is devoted solely to that purpose. But I have not been conscious, as a rule, of any difficulty in making the simultaneous determination in both coördinates.

The accidental errors may be expected to vary with the zenith distance of the stars, owing to increasing unsteadiness, and to uncertainty in the computed refractions, existing under the best conditions. The present series is confined to moderate zenith distances, however, and no difficulty was experienced in obtaining satisfactory observations. Table VII has been formed to exhibit the variation in probable error of observation, according to the zenith distance. The observations at lower culmination are combined, in the last two groups.

Up to 45°, the increase in the probable error is not notable, but there is no doubt that observations at greater zenith distance begin to deteriorate. The table gives the values for one observation, and for the mean of four. The result for one observation can be approximately represented by the expression:

$$\pm (0''.17 + 0''.025 \tan \text{Z. D.})$$

TABLE VII.

PROBABLE ERRORS OF OBS. DECLS.

Decl.	Stars.	Z. D.	1 Obs.	4 Obs.
°		°	″	″
− 2.4	16	−40	±0.19	±0.09
+ 5.7	25	32	.19	.13
15.6	42	22	.19	.10
28.4	72	− 9	.18	.12
44.4	97	+ 7	.17	.12
62.1	67	25	.15	.11
74.9	24	38	.18	.13
83.8	16	46	.15	.10
96.5	16	+59	.21	.13
104.9	24	68	.29	.19
Total,	399	Mean,	±0.19	Mean, ±0.12

The probable error of the determination of the Declination of a star, by observation, may be treated as made up of three parts:

There is the accidental error of the actual observation, a quantity which can not be eliminated, but which is fairly uniform for a given zenith distance, measured by a practiced observer. The error may only be reduced by multiplying the number of observations.

Secondly, there is the error of the adopted standard Declinations, constant so long as the same group of Fundamental stars is used. Since the same group of stars can not be employed in a series of observations, extending through all hours of Right Ascension, this error can not be eliminated, nor treated as a systematic error, until the fundamental Declinations have been corrected. The amount of the error will depend upon the precision of the standard places. With stars of uniform and high degree of precision, the error from this source may be small, considered by itself.

But in its effect upon determination of Declination, the third source of error must be taken into account. This is the error in the constants of reduction for each night, due to errors of observation of the standard stars. This is evidently only to be reduced by increase in the number of stars used.

The object of the observer is to reduce these classes of error as much as is practicable. By combining the results of four observations, made in the two positions of the instrument, the accidental error of observation, in which must be included the graduation error, has been reduced to a point beyond which a large increase in observation, and labor of reduction would be required, to produce any essential gain.

The two other sources of error may be combined, to form the error of the constants of reduction, for a series of observations.

The subject may be illustrated numerically by a comparison of the computed probable errors, arising from the various combinations.

The probable error of a single observation, including division error, is assumed to be ± 0″.21, in this series of observations. The observations of each Fundamental star are subject to the same amount of error.

An approximation to the errors of the catalogue stars is obtained, by comparing the results of observation with the original places of Boss. The following condensed tabulation will indicate the precision of the various classes. It contains 100 stars, two having been rejected because of large and unusual discordance from observation. Polaris has not been included for reason of its exceptional weight in the catalogue. And three circumpolar stars, observed at one culmination only, have not been included here.

The stars are combined in six groups, with the respective weights and probable errors assigned by Boss for 1875, and the probable errors derived from this series of observations. To form the column of probable error for 1897 the probable error of observation has been deducted, in treating the residuals of catalogue and observation.

Weight Boss.	p. e. Boss.	No. Stars.	p. e. 1897.	$\frac{1897}{1875}$
1	±0″.30	15	±0″.45	1.5
2	.21	14	.33	1.6
3– 4	.16	18	.18	1.1
5– 7	.12	19	.28	2.2
8–15	.09	18	.11	1.2
16–26	.07	16	.13	1.8

The first group has three residuals, Obs. — B., exceeding 1″; the second and fourth groups have one each. The ratio between the probable errors predicted for the catalogue in 1875, and those derived from this series of observations, is as consistent as should be expected. There is to be anticipated an increase of error, due to the uncertainty in the proper motions assigned to each star.

The average number of stars employed each night has been twelve, and it may be assumed that if only the stars of higher precision had been used, the last two groups would give an average of four per night. If the twelve are distributed among the groups, with two in each, the probable error of the mean of the adopted Declinations would be ±0″.08. If four stars of the last two groups were employed, the probable error of the mean would be ±0″.06.

For a single determination of Declination there would result the following, for the reduction constants:

Twelve Fundamentals, $\pm \sqrt{(.08^2 + .06^2)} = \pm 0''.10$

Four Fundamentals, $\pm \sqrt{(.06^2 + .11^2)} = \pm 0\ .12$

For the mean of four determinations, there would result:

$$\text{Twelve Fundamentals, } \pm\sqrt{(.08^2+.03^2)} = \pm 0''.09$$
$$\text{Four Fundamentals, } \pm\sqrt{(.06^2+.06^2)} = \pm 0\ .09$$

Combining the last with the probable error of observation, for the mean of four, $\pm 0''.12$, there result:

$$\text{Twelve Fundamentals, } \pm 0''.15$$
$$\text{Four Fundamentals, } \pm 0\ .15$$

As far as the accidental probable error of a final determination is concerned, there appears to be little choice between the use of a large number of standard stars of varying degree of precision, from the catalogue, and the smaller number of more accurate places. But it is important to have the fundamental stars distributed throughout the range of the list, as nearly as possible, and this requires a large number.

For a single determination, or for a smaller number than four, there is a slight gain in precision, in the employment of the larger number of standards. For more than four determinations, the proportional effect of the observation error, upon the reduction constants, is less, and the gain follows the smaller number of more precise standard places.

It is not to be lost sight of, that the mean of the errors of the group of fundamental stars, used for each set of stars to be determined, operates in the sense of a systematic error in the observed Declinations. The preceding discussion may indicate the size of such systematic errors, as are likely to be introduced.

On the other hand, the correction of observations for systematic errors derived from comparison and discussion of insufficient material, may easily result in a decided loss, in the precision of the adopted places. And this is partly because the accidental error of the determination may not have been considered.

For instance, the probable error of the constant of reduction for the mean of twelve Fundamental stars, in this series, is $\pm 0''.06$ each night. A pair of nights, reduced with the same group of Fundamentals, should differ, in half the cases compared, by $0''.1$; and while such difference might be regarded as systematic for the nights, it may properly be considered as purely the result of accidental error of observation.

In any class of observation, there are similar errors in the determination of the constants of reduction, and it is not an abnormal condition, but one legitimately to be expected, that the results of two nights may differ by a constant amount, when this last can be accounted for by the accumulation of accidental errors in the derivation of the quantities used in the reduction.

In the reduction of observations, from some catalogue to another system, the use of systematic corrections is often carried farther than is warranted by the material used for the comparisons.

In the comparison made here of the places of the Fundamental stars actually used, there is no such uncertainty. The correction derived is the one which would be introduced by the use of one system of fundamental places, instead of the alternate system.

In the probable error of the final Declination, the probable error of the adopted places of the group of Fundamental stars should also be included. The same group has been used, in general, for all the determinations of each star of the list. Assuming ± 0″.08 for the Fundamental group, the probable error of the final Declinations would be ± 0″.15. This may be distributed as follows:

p. e. observation, ± 0″.09, mean of four.
p. e. graduation, ± 0 .08, two positions.
p. e. fundamentals, ± 0 .08, group of twelve.
Total p. e., ± 0 .15.

(5) **The Latitude.** The Nadir reading has been made three times, for each full night of observing, and a value of the Latitude has been derived from every observation of a Fundamental star. The Latitude Variation has been computed from *Chandler's* elements, and applied to the results of each night. It has been a period of comparatively large variation, ranging from $(\varphi - \varphi_0) = -0''.24$, in August, 1896, to $(\varphi - \varphi_0) = +0''.28$, in April, 1897; but the mean effect would be nearly eliminated during the series.

The probable error of a determination for one night has been obtained, first, by comparing the results for the same group of stars, and in the same position of the instrument. The probable error of observation is thus found to be ±0″.11 for one night. This is made up of the probable error of Nadir, and of star observations. The probable error of a single Nadir has been obtained by the comparison of 120 determinations, upon 40 full nights, when no rate was adopted in the zenith reading. The adoption of a rate would produce small residuals, for those nights. The probable error of one determination is ± 0″.15, and for the mean of three, ± 0″.09.

The probable error of observation for a group of 12 stars, ± 0″.07, combined with the above, will produce the probable error ± 0″.11 for the determination of one night.

By combining the results from the same group of stars, in both positions of the instrument, the probable error of one night, including the effect of graduation error, is found to be ± 0″.13.

By comparing the results obtained from the individual stars, counting the lower culminations separately, the probable error of φ_0 from one star is ± 0″.30. Deducting ± 0″.13, for the error of observation, there remains ± 0″.27 for the probable error of the adopted Declinations.

In Table VIII, following, the Latitude results are collected by pairs of nights, each result being the mean of one night circle East, and one circle West. The division error of the Nadir reading is thus eliminated. The same group of stars is included in the two values, corresponding to each program. There were four nights broken off by clouds, and these have been combined with the nights upon which the program was completed. Thus 56 nights are included in the series of 26 values in the table. No further observations were made upon stars from Boss, except upon two short nights to complete missing determinations. The probable errors, at the foot, are derived from the residuals of the table.

The value of the Normal Latitude from this series of observation is,

$$\varphi_0 = 37^\circ\ 20'\ 25''.42\ (\pm\ 0''.03).$$

TABLE VIII.

LATITUDE RESULTS.

Date. 1896.	Program. E. & W.	Obs. φ	φ_0
		"	"
Aug. 14	1	25.08	25.30
15	1	24.97	.19
16	3	25.11	.34
18	2	25.32	.55
19	2	25.29	.52
24	3	24.93	.17
Sept. 12	5	25.39	.63
13	5	25.45	.69
16	4	25.43	.66
18	4	25.59	.82
Nov. 8	6	25.43	.55
18	6	25.41	.49
Dec. 13	7	25.39	.37
15	7	25.29	.26
1897.			
Jan. 12	8	25.53	.38
14	8	25.71	.56
31	9	25.42	.21
Feb. 2	9	25.44	.22
Mar. 29	10	25.41	.13
31	11	25.57	.29
April 1	11	25.75	.47
2	10	25.73	.45
May 11	12	25.66	.49
12	13	25.67	.50
13	12	25.60	.43
17	13	25.45	.30
	Mean,	25.42	25.42
Probable error one pair,		±0.15	±0.12
Probable error one night,		±0.21	±0.17
Probable error one program,			±0.11

(6) **Comparison with L. O. 310.** A test of the Declinations of this list is to be found in the comparison with the results of the earlier series of observations, contained in Volume IV of the Publications of this Observatory. There are 36 stars common to both lists, the earlier having been reduced with a zone of B. J. Equatorial stars as Fundamental. The mean difference between the list for the epoch 1895, and the present one, is — 0".12 at mean Decl. 48°. The average residual is ± 0".20, and the largest is 0".72. Without the rejection of any residual, and giving the same weight to each series, the probable error of a Declination from either list is ± 0".12. The effect of graduation error would not be included.

The results of this comparison are combined in the two tables, following, arranged with respect to Right Ascension and Declination. Expressions are given at the foot of each table, representing the respective variations.

TABLES IX AND X.

COMPARISON OF 1895 SERIES WITH 1897 SERIES.

IX. 4-HOUR GROUPS.

R. A.	Mean.	Decl.	No.	1897 − 1895
h h	h	°		"
22 − 1	0	57	7	− 0.02
2 − 5	4	34	5	− .09
6 − 9	8	66	3	+ .04
10 − 13	12	55	7	− .20
14 − 17	16	54	9	− .09
18 − 21	20	19	5	− .36
		Total,	36	Mean, − 0.12
22 − 9	4	52	15	− .02
10 − 21	16	43	21	− .22

X. 20° GROUPS.

Decl.	No.	1897 − 1895	v
°		"	"
+5.0	7	− 0.33	− 0.21
18.4	6	− .06	+ .06
37.7	5	+ .01	+ .13
68.4	3	− .10	+ .02
79.8	15	− .09	+ .03
	36	− 0.12	±0.09

(1897 − 1895) = − 0".20 + 0".002 δ°

(7) **Comparison with Doolittle.** Supplementing the discussion of the observed declinations of this list, the comparison with the original places, derived by Professor DOOLITTLE, has some points of interest. His places are either taken directly from BOSS, reduced to that system, or, in some cases, adopted from other standard authorities. The comparison will indicate the difference between careful systematic discussion of the material previously available for his system of Latitude stars, and the results of direct observation.

The comparison includes 335 stars, nine of his original list having been excluded, for reason of differences exceeding 2". There are no differences remaining, as large as 2", and possibly some of the rejected differences, of which a list is given at the foot of Table XIII, might have been retained.

The mean difference, Observed — Computed, is — 0".14 at mean Decl. 40°.4. The average difference is the same as the average residual from the mean, ± 0".48.

The probable error of a computed Declination, for his list, is thus found to be very closely ± 0".4.

The differences in the following three tables are to be taken in the sense Observed — Computed, and hence indicate the correction to the computed Declinations.

Table XI gives the differences in hourly groups. Though evidently largely accidental in character, the differences may be represented by the expression, $-0''.14 + 0''.10 \cos \alpha$; and the probable error of a group will be reduced from $\pm 0''.14$ to $\pm 0''.13$, by its use.

Table XII contains the differences in four-hour groups, according to the arrangement of the programs, as observed here. For each group the difference, Obs. — Boss, must necessarily be zero.

Table XIII contains the combination, with respect to the Declinations. By the use of the expression for the systematic difference, $-0''.30 + 0''.004\ \delta°$, the average of the group residuals is reduced from $\pm 0''.14$ to $\pm 0''.09$; but the average residual per star is only reduced to $\pm 0''.47$.

Subtracting the systematic difference, Obs. — Boss, $-0''.08 + 0''.002\ \delta°$, from the above, there remains the correction necessary to reduce the places of the computed list to the system of Boss: $-0''.22 + 0''.002\ \delta°$.

TABLES XI, XII, XIII.

COMPARISON OF OBSERVED AND COMPUTED DECLINATIONS.

XI. HOURLY GROUPS.

R. A.	Stars.	Decl.	Δ	v
h		°	″	″
0.4	9	40	+0.15	+0.29
1.4	10	41	− .11	+ .03
2.5	7	41	+ .03	+ .17
3.4	9	40	− .11	+ .03
4.5	10	41	− .01	+ .13
5.5	15	39	− .08	+ .06
6.5	11	40	− .61	− .47
7.5	14	40	− .40	− .26
8.6	12	43	+ .06	+ .20
9.5	16	38	− .23	− .09
10.5	18	39	− .12	+ .02
11.5	14	42	− .31	− .17
12.5	15	42	− .07	+ .07
13.5	10	40	− .44	− .30
14.5	20	40	+ .23	+ .37
15.6	17	42	− .18	− .04
16.6	16	41	− .05	+ .09
17.5	16	37	− .30	− .16
18.5	16	42	− .35	− .21
19.4	13	44	− .08	+ .06
20.5	18	41	− .29	− .15
21.6	17	40	− .19	− .05
22.4	16	42	+ .08	+ .22
23.5	16	43	+ .15	+ .29
Sum,	335	Means,	−0.14	±0.16

Δ (Obs. − Comp.) = $-0''.14 + 0''.10 \cos.\alpha$

XII. 4-HOUR GROUPS.

R. A.	Mean.	Decl.	Δ	v
h h	h	°	″	″
22 − 1	0	41	+0.07	+0.20
2 − 5	4	40	− .04	+ .09
6 − 9	8	40	− .29	− .16
10 − 13	12	41	− .24	− .11
14 − 17	16	40	− .07	+ .06
18 − 21	20	42	− .23	− .10
		Means,	−0.13	±0.12

XIII. 10° GROUPS.

R. A.	Stars.	Decl.	Δ	v
h		°	″	″
14	14	−2.4	−0.49	−0.33
14	24	+5.8	− .45	− .29
11	38	15.4	− .09	+ .07
14	39	24.9	− .09	+ .07
14	46	35.8	− .24	− .08
13	56	44.3	− .09	+ .07
14	40	55.6	− .15	+ .01
11	41	65.0	− .03	+ .13
14	24	75.1	− .02	+ .14
13	13	83.2	+ .07	+ .23
Sum,	335	Means,	−0.16	±0.14

Δ (Obs. − Comp) = $-0''.30 + 0''.004\ \delta°$

Stars omitted from the above tables:

R. A.	Decl.	Δ
h	°	″
5.2	18.3	−3.2
13.3	85.3	−2.15
13.8	83.3	−2.23
14.5	37.4	−2.59
15.9	72.7	+2.2
18.7	49.3	−2.56 Boss.
19.0	31.6	−2.7
20.6	60.1	+4.7
21.9	42.3	−2.59 Boss.

(8) **The Separate Observations.** In the pages following are given the dates, position of the instrument, and the separate declinations. The number is from the current list, and the constellation name follows, in many cases. For stars from Boss, his Declination is given at the top. Many stars are simply noted as from the British Association Catalogue, without assigning the corresponding number. The observations at lower culmination come in the order of transit, twelve hours from the upper culminations. The reduction for Precession is included, and when the star is in Boss, the proper motion is applied along with the reduction to 1897.0. No proper motions have been derived for the stars not contained in Boss. The observed Latitude is given for each Boss star, used as Fundamental, and the same corrected for the Variation. There are 1766 observations, of 361 stars, in the series following.

OBSERVATIONS OF BETHLEHEM LATITUDE STARS.

No. 1. 22 Androm.

Cat.		R. A.	Decl. 1897.0.
		h m s	° ′ ″
B. J.		0 4 58	45 29 55.88
1896.			
Sept.	7 E		45 29 37.01
	9 E		36.39
	25 W		36.96
	28 W		36.64
1896.72		4	36.75
Prec.			+20.05
1897.0			45 29 56.80
P. M.			−.01
Obs. − B. J.			+0.91

No. 2.

B. A. C.		0 11 20	°35 55 2
1896.			
Sept.	7 E		35 54 43.43
	9 E		43.88
	25 W		43.31
	28 W		42.99
1896.72		4	43.40
Prec.			+20.03
1897.0			35 55 3.43

No. 3.

Cat.		R. A.	Decl. 1897.0.
		h m s	° ′ ″
B. A. C.		0 11 42	38 6 35
1896.			
Sept.	1 E		38 6 15.44
	3 E		15.10
	16 W		14.75
	23 W		14.63
	29 W		14.14
1896.70		5	½ (E+W) 14.89
Prec.			+20.03
1897.0			38 6 34.92

No. 4.

B. A. C.		0 13 16	43 13 9
1896.			
Sept.	1 E		43 12 48.51
	3 E		48.35
	16 W		48.30
	23 W		48.45
	29 W		48.59
1896.70		5	½ (E+W) 48.44
Prec.			+20.02
1897.0			43 13 8.46

No. 5.

Cat.		R. A.	Decl. 1897.0.
		h m s	° ′ ″
B. A. C.		0 22 36	18 56 40
1896.			
Sept.	7 E		18 56 20.36
	9 E		19.89
	25 W		20.78
	28 W		20.35
1896.72		4	20.34
Prec.			+19.96
1897.0			18 56 40.30

No. 6. *κ* Cassiop.

Boss.		0 27 8	62 21 47.73
1896.			
Sept.	7 E		62 21 28.02
	9 E		27.87
	25 W		27.62
	28 W		27.88
1896.72		4	27.85
Prec. + P. M.			+19.90
1897.0			62 21 47.75
Obs. − Boss			+0.02
φ			37 20 25.49
φ_0			25.72

No. 157 L. C. $\varkappa$ Draco.

Cat.		R. A. h m s	Decl. 1897.0. ° ′ ″
Boss.		12 29 5	70 21 21.23
1896.			
Sept. 1	E		70 21 41.01
3	E		41.68
16	W		40.44
23	W		41.16
29	W		40.56
1896.70	5		½ (E+W) 41.03
Prec. + P. M.			−19.89
1897.0			70 21 21.14
Obs. − Boss			−0.09
φ			37 20 25.30
φ_o			25.53

No. 7. 21 Cassiop.

Boss.		0 38 50	74 25 30.30
1896.			
Sept. 1	E		74 25 9.92
3	E		10.12
16	W		10.15
23	W		9.92
29	W		10.17
1896.70	5		½ (E+W) 10.05
Prec. + P. M.			+19.74
1897.0			74 25 29.79
Obs. − Boss			−0.51
φ			37 20 25.90
φ_o			26.13

No. 8.

B. J.		0 43 20	+7 1 27.86
1896.			
Sept. 7	E		7 1 8.76
9	E		8.88
25	W		8.84
28	W		8.64
1896.72			8.78
Prec.			+19.70
1897.0			7 1 28.48
P. M.			−.01
Obs. − B. J.			+0.61

No. 163 L. C. 32 Cam. fol.

Boss.		12 48 22	83 58 21.60
1896.			
Sept. 1	E		83 58 42.05
3	E		41.49
23	W		41.39
29	W		41.14
1896.71	4		41.52
Prec. + P. M.			−19.59
1897.0			83 58 21.93
Obs. − Boss			+0.33
φ			37 20 25.74
φ_o			25.97

No. 9. μ Androm.

Cat.		R. A. h m s	Decl. 1897.0. ° ′ ″
Boss.		0 51 2	37 56 25.39
1896.			
Sept. 1	E		37 56 6.76
3	E		7.11
7	E		7.33
9	E		7.05
23	W		6.70
25	W		6.88
28	W		6.62
29	W		6.38
1896.71	8		6.85
Prec. + P. M.			+19.56
1897.0			37 56 26.41
Obs. − Boss			+1.02
φ			37 20 24.44
φ_o			24.67

No. 10.

B. A. C.		1 2 6	43 23 35
1896.			
Sept. 7	E		43 23 16.50
9	E		16.57
25	W		16.20
28	W		16.26
1896.72	4		16.38
Prec.			+19.32
1897.0			43 23 35.70

No. 11.

B. A. C.		1 7 37	−7 19 49
1896.			
Sept. 7	E		−7 20 6.77
9	E		7.08
25	W		6.70
28	W		6.60
1896.72	4		6.79
Prec.			+19.19
1897.0			−7 19 47.60

No. 12.

B. A. C.		1 14 12	64 7 5
1896.			
Sept. 7	E		64 6 45.78
9	E		45.87
25	W		45.69
28	W		45.35
1896.72	4		45.67
Prec.			+19.01
1897.0			64 7 4.68

No. 13.

Cat.		R. A. h m s	Decl. 1897.0. ° ′ ″
B. A. C.		1 18 18	17 16 54
1896.			
Sept. 7	E		17 16 34.66
9	E		34.30
25	W		34.73
28	W		34.16
1896.72	4		34.46
Prec.			+18.89
1897.0			17 16 53.35

No. 169 L. C.

B. A. C.		13 18 44	85 17 36
1896.			
Sept. 1	E		85 17 53 45
3	E		53.78
	W		53.36
29	W		53.74
1896.71	4		53.58
Prec.			−18.88
1897.0			85 17 34.70

No. 14. α Urs. Min.

Boss.		1 21 18	88 45 30.21
1896.			
Sept. 1	E		88 45 11.62
3	E		11.70
23	W		11.32
29	W		11.06
1896.71	4		11.42
Prec. + P. M.			+18.81
1897.0			88 45 30.23
Obs. − Boss			+0.02
φ			37 20 25.40
φ_o			25.63

No. 15. 38 Cassiop.

Boss.		1 23 33	69 44 3.94
1896.			
Sept. 1	E		69 44 44.97
3	E		45.16
23	W		45.67
29	W		45.37
1896.71	4		45.29
Prec. + P. M.			+18.66
1897.0			69 44 3.95
Obs. − Boss			+0.01
φ			37 20 25.40
φ_o			25.63

No. 16.

Cat.		R. A.	Decl. 1897.0.
		h m s	° ′ ″
B. A. C.		1 27 5	11 21 10
1896.			
Sept. 7	E		11 20 51.76
9	E		51.36
25	W		51.24
28	W		51.08
1896.72	4		51.36
Prec.			+18.62
1897.0			11 21 9.98

No. 17. *υ* Androm.

A. E.		1 30 45	40 53 25.53
1896.			
Sept. 1	E		40 53 6.45
3	E		6.63
23	W		6.45
29	W		6.04
1896.71	4		6.39
Prec.			+18.50
1897.0			40 53 24.89
P. M.			−0.11
Obs. − A. E.			−0.75

No. 18.

B. A. C.		1 34 30	40 3 20
1896.			
Sept. 7	E		40 3 0.96
9	E		0.53
25	W		0.36
28	W		0.82
1896.72	4		40 3 0.67
Prec.			+18.37
1897.0			40 3 19.04

No. 173 L. C.

B. A. C.		13 45 16	83 16 10
1896.			
Sept. 1	E		83 16 27.41
3	E		26.79
23	W		26.40
29	W		26.67
1896.71			26.82
Prec.			−17.97
1897.0			83 16 8.85

No. 174 L. C.

Cat.		R. A.	Decl. 1897.0.
		h m s	° ′ ″
Boss.		13 50 29	79 30 13.85
1896.			
Sept. 1	E		79 30 32.21
3	E		32.00
23	W		32.24
29	W		32.18
Nov. 4	W		33.24
6	W		33.36
12	E		32.39
30	E		32.13
1896.79	8		32.47
Prec. + P. M.			−17.78
1897.0			79 30 14.69
Obs. − Boss			+0.84
φ			37 20 26.22
φ_o			26.45

No. 19.

B. A. C.		1 51 43	17 18 52
1896.			
Sept. 7	E		17 18 35.49
9	E		35.37
25	W		35.08
28	W		35.34
1896.72	4		35.32
Prec.			+17.72
1897.0			17 18 53.04

No. 20. 53 Cassiop.

Boss.		1 55 22	63 53 34.25
1896.			
Sept. 3	E		63 53 15.41
7	E		15.50
9	E		15.44
23	W		15.46
25	W		15.07
28	W		15.22
29	W		15.12
1896.72	7		½ (E+W) 15.33
Prec. + P. M.			+17.58
1897.0			63 53 32.91
Obs. − Boss			−1.34
φ			37 20 26.78
φ_o			27.01

No. 21. *β* Trianguli.

Cat.		R. A.	Decl. 1897.0.
		h m s	° ′ ″
Boss.		2 3 24	34 30 0.01
1896.			
Sept. 3	E		34 29 43.40
7	E		43.31
9	E		43.44
23	W		43.48
25	W		42.55
28	W		43.13
Nov. 4	W		42.50
6	W		42.65
12	E		42.84
30	E		42.90
1896.77	10		34 29 43.02
Prec. + P. M.			+17.17
1897.0			34 30 0.19
Obs. − Boss			+0.18
φ			37 20 25.26
φ_o			25.29

No. 179 L. C. 4 Urs. Min.

B. J.		14 9 14	78 1 53.68
1896.			
Nov. 4	W		78 2 10.92
6	W		10.83
12	E		10.11
30	E		9.93
1896.87	4		10.45
Prec.			−16.95
1897.0			78 1 53.50
P. M.			+0.01
Obs. − B. J.			−0.17

No. 22.

B. A. C.		2 12 37	46 54 15
1896.			
Nov. 4	W		46 53 59.29
6	W		59.43
12	E		58.05
30	E		59.37
1896.87	4		59.04
Prec.			+16.79
1897.0			46 54 15.83

No. 23. ι Cassiop.

Cat.		R. A. h m s	Decl. 1897.0 ° ′ ″
Boss.		2 20 34	66 56 21.11
1896.			
Nov. 4	W		66 56 5.05
6	W		4.69
12	E		4.78
30	E		4.69
1896.87	4		4.80
Prec. + P. M.			+16.40
1897.0			66 56 21.20
Obs. – Boss			+0.09
φ			37 20 25.27
φ_o			25.30

No. 24.

B. A. C.		2 27 15	14 34 41
1896.			
Nov. 4	W		14 34 25.93
6	W		26.27
12	E		26.35
30	E		26.27
1896.87	4		26.21
Prec.			+16.05
1897.0			14 34 42.26

No. 25.

B. A. C.		2 35 40	54 39 59
1896.			
Nov. 4	W		54 39 42.75
6	W		42.79
12	E		42.84
30	E		42.71
1896.87	4		42.77
Prec.			+15.60
1897.0			54 39 58.37

No. 26. 41 Arietis.

B. A. C.		2 43 55	26 50 9.03
1896.			
Nov. 4	W		26 49 53.62
6	W		54.05
12	E		54.15
30	E		54.35
1896.87	4		54.04
Prec. + P. M.			+15.02
1897.0			26 50 9.06
Obs. – Boss			+0.03
φ			37 20 25.33
φ_o			25.36

No. 27.

Cat.		R. A. h m s	Decl. 1897.0. ° ′ ″
B. A. C.		2 53 0	40 37 20
1896.			
Nov. 4	W		40 37 5.38
6	W		5.31
12	E		6.23
30	E		5.01
1896.87	4		5.48
Prec.			+14.61
1897.0			40 37 20.09

No. 28. β Persei.

Boss.		3 1 27	40 33 31.14
1896.			
Nov. 4	W		40 33 17.18
6	W		17.21
12	E		17.55
30	E		16.93
1896.87	4		17.22
Prec. + P. M.			+14.08
1897.0			40 33 31.30
Obs. – Boss			+0.16
φ			37 20 25.20
φ_o			25.23

No. 29.

B. A. C.		3 4 38	39 13 13
1896.			
Nov. 4	W		39 12 58.53
6	W		58.66
12	E		58.62
30	E		58.65
1896.87	4		58.61
Prec.			+13.89
1897.0			39 13 12.50

No. 30.

B. A. C.		3 8 6	42 7 7
1896.			
Nov. 4	W		42 6 54.13
6	W		53.78
12	E		54.11
30	E		54.05
1896.87	4		54.02
Prec.			+13.67
1897.0			42 7 7.69

No. 31.

Cat.		R. A. h m s	Decl. 1897.0. ° ′ ″
B. A. C.		3 19 38	71 30 17
1896.			
Nov. 4	W		71 30 4.81
6	W		4.05
12	E		4.32
30	E		4.09
1896.87	4		4.32
Prec.			+12.91
1897.0			71 30 17.23

No. 32. ξ Tauri.

Boss.		3 21 35	9 22 24.04
1896.			
Nov. 4	W		9 22 11.94
6	W		12.39
12	E		11.96
30	E		11.71
1896.87	4		12.00
Prec. + P. M.			+12.73
1897.0			9 22 24.73
Obs. – Boss			+0.69
φ			37 20 24.67
φ_o			24.70

No. 33.

B. A. C.		3 33 36	16 12 6
1896.			
Nov. 4	W		16 11 53.25
6	W		53.23
12	E		53.38
30	E		53.00
1896.87	4		53.21
Prec.			+11.96
1897.0			16 12 5.17

No. 34.

B. A. C.		3 40 5	65 12 27
1896.			
Nov. 4	W		65 12 14.83
6	W		14.65
12	E		15.23
30	E		14.66
1896.87	4		14.84
Prec.			+11.50
1897.0			65 12 26.34

No. 208 L. C. 2 Urs. Min.

Cat.		R. A. h m s	Decl. 1897.0. ° ′ ″
Boss.		15 47 44	78 6 40.70
1896.			
Nov. 4	W		78 6 51.70
6	W		52.31
12	E		51.47
30	E		51.17
Dec. 2	E		51.29
8	E		51.39
9	E		51.61
19	W		51.33
21	W		51.82
1896.91	9	½ (E+W)	51.59
Prec. + P. M.			−10.94
1897.0			78 6 40.65
Obs. − Boss			−0.05
φ			37 20 25.34
φ_0			25.37

No. 35.

B. A. C.		3 50 47	22 10 51
1896.			
Nov. 4	W		22 10 41.60
6	W		42.13
12	E		40.89
30	E		41.18
1896.87	4		41.45
Prec.			+10.72
1897.0			22 10 52.17

No. 36.

B. A. C.		3 55 52	58 52 8
1896.			
Nov. 4	W		58 51 58.35
6	W		58.12
12	E		58.04
30	E		58.00
1896.87	4		58.13
Prec.			+10.34
1897.0			58 52 8.47

No. 211 L. C.

B. A. C.		15 56 41	72 41 10
1896.			
Dec. 8	E		72 41 21.82
9	E		22.10
19	W		20.69
21	W		21.57
1896.96	4		21.55
Prec.			−10.28
1897.0			72 41 11.27

No. 212 L. C.

Cat.		R. A. h m s	Decl. 1897.0. ° ′ ″
B. A. C.		15 57 27	75 52 10
1896.			
Nov. 4	W		75 52 19.06
6	W		19.92
12	E		19.55
Dec. 2	E		20.00
1896.88	4		19.63
Prec.			−10.22
1897.0			75 52 9.41

No. 37.

B. A. C.		4 3 10	19 20 12
1896.			
Nov. 4	W		19 20 2.23
6	W		2.48
12	E		2.77
30	E		1.96
1896.87	4		2.36
Prec.			+9.79
1897.0			19 20 12.15

B. 85. μ Persei.

Boss.		4 7 19	48 8 50.59
1896.			
Dec. 8	E		48 8 41.10
9	E		41.44
19	W		41.14
21	W		41.33
1896.96	4		41.25
Prec. + P. M.			+9.43
1897.0			48 8 50.68
Obs. − Boss			+0.09
φ			37 20 25.25
φ_0			25.28

No. 38.

B. A. C.		4 7 48	61 35 28
1896.			
Nov. 4	W		61 35 18.07
6	W		18.08
12	E		17.91
30	E		17.80
1896.87	4		17.96
Prec.			+9.43
1897.0			61 35 27.39

No. 39.

Cat.		R. A. h m s	Decl. 1897.0. ° ′ ″
B. A. C.		4 11 29	49 47 50
1896.			
Nov. 4	W		49 47 41.59
6	W		41.69
12	E		40.86
30	E		41.25
1896.87	4		41.35
Prec.			+9.14
1897.0			49 47 50.49

No. 216 L. C. 19 Urs. Min.

B. J.		16 13 45	76 8 12.37
1896.			
Dec. 8	E		76 8 21.68
9	E		22.25
19	W		21.46
21	W		21.41
1896.96	4		21.70
Prec.			−8.97
1897.0			76 8 12.73
P. M.			0.00
Obs. − B. J.			+0.36

B. 86. γ Tauri.

Boss.		4 13 55	15 22 43.67
1896.			
Nov. 4	W		15 22 34.39
6	W		34.73
12	E		34.21
30	E		34.11
Dec. 2	E		34.42
1896.88	5	½ (E+W)	34.40
Prec. + P. M.			+8.93
1897.0			15 22 43.33
Obs. − Boss			−0.34
φ			37 20 25.77
φ_0			25.80

No. 40.

B. A. C.		4 19 32	31 12 22
1896.			
Nov. 4	W		31 12 13.90
6	W		13.95
12	E		14.14
Dec. 2	E		14.04
1896.88	4		14.01
Prec.			+8.51
1897.0			31 12 22.52

B. 87. ε Tauri.

Cat.		R. A. h m s	Decl. 1897.0. ° ′ ″
Boss.		4 22 36	18 57 6.48
1896.			
Nov. 4	W		18 56 58.11
6	W		58.38
12	E		57.38
Dec. 2	E		57.87
1896.88	4		57.94
Prec. + P. M.			+8.22
1897.0			18 57 6.16
Obs. – Boss			–0.32
φ			37 20 25.80
φ_o			25.83

No. 41.

B. A. C.		4 31 47	52 52 27
1896.			
Dec. 8	E		52 52 19.21
9	E		18.91
19	W		19.46
21	W		19.46
1896.96	4		19.26
Prec.			+7.53
1897.0			52 52 26.79

No. 42.

B. A. C.		4 34 52	28 24 54
1896.			
Nov. 4	W		28 24 47.29
6	W		47.29
12	E		48.08
30	E		48.06
Dec. 2	E		47.96
1896.88	5	½ (E + W)	47.66
Prec.			+7.28
1897.0			28 24 54.94

B. 89. 4 Camelop.

Boss.		4 39 25	56 34 26.39
1896.			
Dec. 8	E		56 34 19.32
9	E		19.03
19	W		19.70
21	W		20.05
1896.96	4		56 34 19.52
Prec. + P. M.			+6.75
1897.0			56 34 26.27
Obs. – Boss			–0.12
φ			37 20 25.46
φ_o			25.49

No. 43.

Cat.		R. A. h m s	Decl. 1897.0. ° ′ ″
B. A. C.		4 44 14	6 46 53
1896.			
Nov. 4	W		6 46 46.00
6	W		46.20
12	E		46.15
30	E		46.18
Dec. 2	E		46.40
1896.88	5	½ (E + W)	46.17
Prec.			+6.51
1897.0			6 46 52.68

No. 44.

B. A. C.		4 49 15	74 6 34
1896.			
Nov. 4	W		74 6 28.77
6	W		28.72
12	E		28.12
Dec. 2	E		28.23
1896.88	4		28.46
Prec.			+6.09
1897.0			74 6 34.55

No. 45. β Camelop.

Boss.		4 54 15	60 17 29.24
1896.			
Nov. 4	W		60 17 23.85
6	W		23.30
12	E		23.36
Dec. 2	E		23.58
1896.88	4		23.52
Prec. + P. M.			+5.66
1897.0			60 17 29.18
Obs. – Boss			–0.06
φ			37 20 25.53
φ_o			25.56

No. 228 L. C. ε Urs. Min.

Boss.		16 56 31	82 12 23.95
1896.			
Dec. 8	E		82 12 29.49
9	E		29.29
19	W		29.14
21	W		29.27
1896.96	4		29.30
Prec. + P. M.			–5.49
1897.0			82 12 23.81
Obs. – Boss			–0.14
φ			37 20 25.20
φ_o			25.23

No. 46.

Cat.		R. A. h m s	Decl. 1897.0. ° ′ ″
B. A. C.		4 58 13	21 8 0
1896.			
Nov. 4	W		21 7 54.78
6	W		54.37
12	E		54.12
Dec. 2	E		54.55
1896.88	4		54.45
Prec.			+5.34
1897.0			21 7 59.79

No. 47.

B. A. C.		5 1 21	18 30 24
1896.			
Nov. 4	W		18 30 18.68
6	W		18.98
12	E		18.72
Dec. 2	E		18.53
1896.88	4		18.73
Prec.			+5.08
1897.0			18 30 23.81

No. 48.

B. A. C.		5 3 56	62 33 50
1896.			
Dec. 8	E		62 33 44.96
9	E		44.70
19	W		44.99
21	W		44.81
1896.96	4		44.86
Prec.			+4.86
1897.0			62 33 49.72

No. 49.

B. A. C.		5 7 54	2 44 18
1896.			
Nov. 4	W		2 44 14.19
6	W		13.98
12	E		14.25
Dec. 2	E		13.92
1896.88	4		14.08
Prec.			+4.52
1897.0			2 44 18.60

No. 50.

B. A. C.		5 9 56	78 18 35
1896.			
Dec. 8	E		78 18 31.34
9	E		31.69
19	W		31.77
21	W		31.66
1896.96	4		31.61
Prec.			+4.34
1897.0			78 18 35.95

No. 51.

Cat.		R. A.			Decl. 1897.0.		
		h	m	s	°	′	″
B. A. C.		5	10	43	18	19	30
1896.							
Nov.	4	W			18	19	22.74
	6	W					22.89
	12	E					23.34
Dec.	2	E					23.43
1896.88		4					23.10
Prec.							+4.28
1897.0					18	19	27.38

No. 52. γ Orionis.

B. J.		5	19	36	6	15	22.22
1896.							
Nov.	4	W			6	15	18.89
	6	W					18.70
	12	E					18.98
Dec.	2	E					18.99
1896.88		4					18.89
Prec.							+3.52
1897.0					6	15	22.41
P. M.							0.00
Obs. – B. J.							+0.19

No. 53. Groom. 966.

Boss.		5	25	57	74	58	30.90
1896.							
Nov.	4	W			74	58	28.11
	6	W					28.06
Dec.	2	E					27.91
	8	E					27.81
	9	E					27.85
	19	W					27.72
	21	W					27.70
1896.92		7			½ (E+W)		27.88
Prec. + P. M.							+2.99
1897.0					74	58	30.87
Obs. – Boss							–0.03
φ					37	20	25.44
φ_o							25.47

No. 54. Groom. 944.

A. E.		5	28	59	85	8	42.23
1896.							
Nov.	4	W			85	8	39.28
	6	W					38.91
	12	E					38.67
Dec.	2	E					38.97
1896.88		4					38.96
Prec.							+2.70
1897.0					85	8	41.66
P. M.							0.00
Obs. – A. E.							–0.57

B. 103. ε Orionis.

Cat.		R. A.			Decl. 1897.0.		
		h	m	s	°	′	″
Boss.		5	30	59	–1	16	4.17
1896.							
Nov.	4	W			–1	16	6.94
	6	W					7.29
	12	E					6.86
Dec.	2	E					7.06
1896.88		4					–7.04
Prec. + P. M.							+2.53
1897.0					–1	16	4.51
Obs. – Boss							–0.34
φ					37	20	25.81
φ_o							25.84

No. 55.

B. A. C.		5	32	7	65	38	29
1896.							
Dec.	8	E			65	38	26.53
	9	E					26.33
	19	W					25.83
	21	W					26.42
1896.96		4					26.28
Prec.							+2.43
1897.0					65	38	28.71

No. 56.

B. A. C.		5	34	23	–3	37	20
1896.							
Nov.	4	W			–3	37	22.77
	6	W					23.12
	12	E					23.33
Dec.	2	E					22.59
1896.88		4					–22.95
Prec.							+2.24
1897.0					–3	37	20.71

No. 57.

B. A. C.		5	40	50	15	46	54
1896.							
Nov.	4	W			15	46	53.51
	6	W					53.43
	12	E					53.97
Dec.	2	E					53.89
1896.88		4					53.70
Prec.							+1.68
1897.0					15	46	55.38

No. 58.

Cat.		R. A.			Decl. 1897.0.		
		h	m	s	°	′	″
B. A. C.		5	41	51	68	26	28
1896.							
Dec.	8	E			68	26	26.22
	9	E					26.29
	19	W					26.69
	21	W					26.23
1896.96		4					26.36
Prec.							+1.59
1897.0					68	26	27.95

No. 59.

B. A. C.		5	43	45	12	37	7
1896.							
Nov.	4	W			12	37	4.93
	6	W					4.60
	12	E					4.66
Dec.	2	E					5.44
1896.88		4					4.91
Prec.							+1.42
1897.0					12	37	6.33

No. 60.

B. A. C.		5	46	31	14	8	43
1896.							
Nov.	4	W			14	8	42.29
	6	W					42.44
	12	E					42.19
Dec.	2	E					42.51
1896.88		4					42.36
Prec.							+1.18
1897.0					14	8	43.54

B. 107. α Orionis.

Boss.		5	49	35	7	23	15.66
1896.							
Nov.	4	W			7	23	14.51
	6	W					14.85
	12	E					14.51
Dec.	2	E					14.84
1896.88		4					14.68
Prec. + P. M.							+0.92
1897.0					7	23	15.60
Obs. – Boss							–0.06
φ					37	20	25.54
φ_o							25.57

No. 61.

Cat.		R. A. h m s	Decl. 1897.0 ° ′ ″
B. A. C.		5 50 7	67 0 13
1896.			
Dec. 8	E		67 0 11.90
9	E		11.36
19	W		11.55
21	W		11.41
1896.96	4		11.55
Prec.			+0.87
1897.0			67 0 12.42

No. 242 L. C. 35 Draco.

Boss.		17 54 3	76 58 35.12
1896.			
Nov. 4	W		76 58 35.17
6	W		34.88
12	E		34.53
Dec. 2	E		35.12
1896.88	4		34.92
Prec. + P. M.			−0.28
1897.0			76 58 34.64
Obs. − Boss			−0.48
φ			37 20 25.00
φ_0			25.03

No. 62.

B. A. C.		5 55 52	42 54 52
1896.			
Dec. 8	E		42 54 52.41
9	E		51.58
19	W		51.61
21	W		51.64
1896.96	4		51.81
Prec.			+0.36
1897.0			42 54 52.17

No. 245 L. C.

B. A. C.		17 56 58	72 0 54
1896.			
Nov. 4	W		72 0 52.61
6	W		52.39
12	E		53.67
Dec. 2	E		53.09
1896.88	4		52.94
Prec.			−0.26
1897.0			72 0 52.68

No. 63.

B. A. C.		5 59 29	38 29 31
1896.			
Nov. 4	W		38 29 29.87
6	W		29.60
12	E		30.16
Dec. 2	E		30.61
1896.88	4		30.06
Prec.			+0.05
1897.0			38 29 30.11

No. 64.

Cat.		R. A. h m s	Decl. 1897.0. ° ′ ″
B. A. C.		6 3 19	22 12 22
1897.			
Jan. 4	W		22 12 23.10
5	W		23.45
21	E		23.00
22	E		23.25
1897.04	4		22 12 23.20

No. 247 L. C. 40 Draco. S. Prec.

Boss.		18 7 45	79 59 13.89
1896.			
Dec. 8	E		79 59 12.80
9	E		12.87
19	W		13.54
21	W		13.43
1896.96	4		13.16
Prec. + P. M.			+0.80
1897.0			79 59 13.96
Jan. 4	W		79 59 14.27
5	W		14.62
21	E		14.22
22	E		14.22
1897.04	4		79 59 14.33
1897.0	8		79 59 14.14
Obs. − Boss			+0.25
φ			37 20 25.75
φ_0			25.57

B. 112. η Gemin.

Boss.		6 8 40	22 32 11.44
1896.			
Nov. 4	W		22 32 12.21
6	W		11.89
12	E		12.58
Dec. 2	E		12.63
1896.88	4		12.33
Prec. + P. M.			−0.77
1897.0			22 32 11.56
Jan. 8	W		22 32 11.49
11	W		11.51
Feb. 24	E		10.94
25	E		10.87
1897.09	4		22 32 11.20
1897.0	8		22 32 11.38
Obs. − Boss			−0.06
φ			37 20 25.51
φ_0			25.33

No. 65. 2 Lyncis.

Cat.		R. A. h m s	Decl. 1897.0. ° ′ ″
B. J.		6 10 32	59 2 52.96
1897.			
Jan. 4	W		59 2 52.49
5	W		52.48
21	E		52.57
22	E		52.45
1897.04	4		59 2 52.50
P. M.			0.00
Obs. − B. J.			−0.46

B. 113. μ Gemin.

Boss.		6 16 44	22 33 58.36
1897.			
Jan. 4	W		22 33 59.23
5	W		59.05
21	E		57.92
22	E		58.35
1897.04	4		22 33 58.64
Obs. − Boss			+0.28
φ			37 20 25.34
φ_0			25.16

No. 66.

B. A. C.		6 17 49	58 28 24
1897.			
Jan. 8	W		58 28 23.18
11	W		22.88
Feb. 24	E		23.31
25	E		23.04
1897.09	4		58 28 23.10

No. 67.

B. A. C.		6 24 8	22 36 49
1897.			
Jan. 4	W		22 36 47.46
5	W		47.79
21	E		46.88
22	E		47.52
1897.04	4		22 36 47.41

No. 68.

B. A. C.		6 24 55	73 46 29
1896.			
Dec. 8	E		73 46 30.45
9	E		30.17
19	W		30.84
21	W		30.64
1896.96	4		30.52
Prec.			−2.17
1897.0			73 46 28.35

No. 69.

Cat.	R. A.	Decl. 1897.0.
	h m s	° ′ ″
B. A. C.	6 27 20	7 24 33
1897.		
Jan. 8	W	7 24 28.84
11	W	29.79
Feb. 24	E	29.47
25	E	28.91
1897.09	4	7 24 29.25

No. 70.

B. A. C.	6 29 28	38 31 43
1897.		
Jan. 4	W	38 31 41.76
5	W	41.59
21	E	41.81
22	E	42.11
1897.04	4	38 31 41.82

No. 71.

B. A. C.	6 31 58	42 34 45
1897.		
Jan. 8	W	42 34 45.07
11	W	45.79
Feb. 24	E	45.45
25	E	44.98
1897.09	4	42 34 45.32

No. 72.

B. A. C.	6 37 7	59 32 45
1897.		
Jan. 8	W	59 32 43.59
11	W	43.59
Feb. 24	E	43.99
25	E	44.14
1897.09	4	59 32 43.83

B. 116. ε Gemin.

Boss.	6 37 36	25 13 58.66
1897.		
Jan. 4	W	25 13 58.32
5	W	58.58
21	E	58.69
22	E	58.05
1897.04	4	25 13 58.41
Obs. – Boss		–0.25
φ		37 20 25.87
φ_o		25.69

No. 73.

Cat.	R. A.	Decl. 1897.0.
	h m s	° ′ ″
B. A. C.	6 45 23	21 52 57
1897.		
Jan. 4	W	21 52 56.84
5	W	57.00
21	E	56.62
22	E	56.95
1897.04	4	21 52 56.85

B. 118. θ Gemin.

Boss.	6 46 0	34 5 6.81
1897.		
Jan. 8	W	34 5 6.03
11	W	6.33
Feb. 24	E	7.02
25	E	6.65
1897.09	4	34 5 6.51
Obs. – Boss		–0.30
φ		37 20 25.73
φ_o		25.55

B. 117. 51 H. Ceph.

Boss.	6 52 15	87 12 34.16
1897.		
Jan. 4	W	87 12 34.61
5	W	34.45
8	W	34.28
11	W	34.35
21	E	34.12
22	E	34.39
Feb. 24	E	34.66
25	E	34.68
1897.06	8	87 12 34.44
Obs. – Boss		+0.28
φ		37 20 25.24
φ_o		25.06

No. 74.

B. A. C.	6 56 57	29 30 37
1897.		
Jan. 8	W	29 30 35.34
11	W	34.27
Feb. 24	E	34.99
25	E	34.64
1897.09	4	29 30 34.81

No. 75.

B. A. C.	7 5 21	51 35 58
1897.		
Jan. 4	W	51 35 57.19
5	W	57.73
21	E	57.00
22	E	56.93
1897.04	4	51 35 57.21

No. 76.

Cat.	R. A.	Decl. 1897.0.
	h m s	° ′ ″
B. A. C.	7 5 47	81 26 39
1897.		
Jan. 4	W	81 26 38.66
5	W	38.77
21	E	38.25
22	E	38.51
1897.04	4	81 26 38.55

No. 77.

B. A. C.	7 6 36	–0 19 19
1897.		
Jan. 8	W	–0 19 21.34
11	W	[19.70]
Feb. 24	E	21.29
25	E	21.13
1897.09	4 ½(E+W)	–0 19 21.27

No. 78.

B. A. C.	7 9 42	59 6 5
1897.		
Jan. 4	W	59 6 4.52
5	W	4.26
21	E	4.09
22	E	4.98
1897.04	4	59 6 4.46

No. 269 L. C.

B. A. C.	19 12 57	76 23 20
1897.		
Jan. 8	W	76 23 20.00
11	W	21.09
Feb. 24	E	20.03
25	E	19.89
1897.09	4	76 23 20.25

No. 79. δ Gemin.

Boss.	7 13 58	22 10 18.51
1897.		
Jan. 4	W	22 10 18.66
5	W	18.77
21	E	18.36
22	E	18.50
1897.04	4	22 10 18.57
Obs. – Boss		+0.06
φ		37 20 25.56
φ_o		25.38

No. 80. Groom. 1308.

Cat.		R. A. h m s	Decl. 1897.0 ° ′ ″
Boss.		7 20 10	68 40 33.17
1897.			
Jan. 4	W		68 40 32.81
5	W		32.85
8	W		32.75
11	W		32.85
21	E		32.64
22	E		32.46
Feb. 24	E		32.31
25	E		32.84
1897.06	8		68 40 32.69
Obs. – Boss			−0.48
φ			37 20 26.01
φ_0			25.83

No. 81.

B. A. C.		7 24 3	12 13 10
1897.			
Jan. 4	W		12 13 9.15
5	W		9.92
21	E		9.88
22	E		9.56
1897.04	4		12 13 9.63

No. 82.

B. A. C.		7 29 2	46 24 29
1897.			
Jan. 4	W		46 24 25.82
5	W		25.06
21	E		25.64
22	E		25.35
1897.04	4		46 24 25.47

No. 83.

B. A. C.		7 32 27	34 49 14
1897.			
Jan. 4	W		34 49 12.94
5	W		13.01
21	E		13.79
22	E		13.47
1897.04	4		34 49 13.30

No. 84. $\varkappa$ Gemin.

Cat.		R. A. h m s	Decl. 1897.0 ° ′ ″
Boss.		7 38 14	24 38 41.08
1897.			
Jan. 4	W		24 38 41.21
5	W		41.30
8	W		41.11
11	W		41.35
21	E		41.06
22	E		41.05
Feb. 24	E		41.07
25	E		41.07
1897.06	8		24 38 41.15
Obs. – Boss			+0.07
φ			37 20 25.45
φ_0			25.27

No. 85.

B. A. C.		7 48 6	56 46 31
1897.			
Jan. 4	W		56 46 29.89
5	W		29.78
21	E		29.45
22	E		29.80
1897.04	4		56 46 29.73

No. 275 L. C. ε Draco.

Boss.		19 48 31	70 0 20.21
1897.			
Jan. 8	W		70 0 19.37
11	W		[22.06]
Feb. 24	E		19.75
25	E		18.58
1897.09	4	½(E+W)	70 0 19.27
Obs. – Boss			−0.94
φ			37 20 24.45
φ_0			24.27

No. 86.

B. A. C.		7 52 17	84 21 18
1897.			
Jan. 4	W		84 21 18.15
5	W		18.06
21	E		18.00
22	E		17.91
1897.04	4		84 21 18.03

No. 87.

Cat.		R. A. h m s	Decl. 1897.0 ° ′ ″
B. A. C.		7 54 35	−3 23 56
1897.			
Jan. 8	W		−3 23 56.77
11	W		56.40
Feb. 24	E		56.27
25	E		56.88
1897.09	4		−3 23 56.58

No. 88.

B. A. C.		7 57 46	22 21 33
1897.			
Jan. 4	W		22 21 33.75
5	W		33.79
21	E		33.21
22	E		33.53
1897.04	4		22 21 33.57

No. 89.

B. A. C.		8 1 37	58 32 58
1897.			
Jan. 8	W		58 32 58.01
11	W		58.22
Feb. 24	E		58.38
25	E		58.24
1897.09	4		58 32 58.21

No. 90.

B. A. C.		8 13 48	27 33 5
1897.			
Jan. 4	W		27 33 3.47
5	W		3.85
21	E		4.37
22	E		4.06
1897.04	4		27 33 3.94

No. 91.

B. A. C.		8 16 1	53 33 4
1897.			
Jan. 8	W		53 33 4.73
11	W		5.05
Feb. 24	E		3.79
25	E		3.94
1897.09	4		53 33 4.38

No. 92. o Urs. Maj.

Cat.		R. A. h m s	Decl. 1897.0. ° ′ ″
Boss.		8 21 43	61 3 43.82
1897.			
Jan.	4	W	61 3 44.32
	5	W	44.15
	8	W	44.35
	11	W	44.37
	21	E	44 60
	22	E	44.61
Feb.	24	E	44.64
	25	E	44.58
1897.06		8	61 3 44.45
Obs. – Boss			+0.63
φ			37 20 24.89
φ_o			24.71

No. 93.

B. A. C.		8 29 24	19 56 40
1897.			
Jan.	4	W	19 56 38.73
	5	W	38.80
	21	E	38.74
	22	E	38.45
1897.04		4	19 56 38.68

No. 289 L. C.

B. A. C.		20 34 43	81 4 12
1897.			
Jan.	8	W	81 4 11.80
	11	W	11.53
Feb.	24	E	11.94
	25	E	11.63
1897.09		4	81 4 11.72

No. 94. δ Cancri.

Boss.		8 38 50	18 31 58.06
1897.			
Jan.	4	W	18 31 57.67
	5	W	58.02
	21	E	57.76
	22	E	57.76
1897.04		4	18 31 57.80
Obs. – Boss			−0.26
φ			37 20 25.88
φ_o			25.70

No. 95.

B. A. C.		8 44 8	33 40 12
1897.			
Jan.	4	W	33 40 11.29
	5	W	11.00
	21	E	11.59
	22	E	11.67
1897.04		4	33 40 11.39

No. 96.

Cat.		R. A. h m s	Decl. 1897.0. ° ′ ″
B. A. C.		8 44 54	62 20 50
1897.			
Jan.	8	W	62 20 50.79
	11	W	50.43
Feb.	24	E	50.96
	25	E	50.97
1897.09		4	62 20 50.79

No. 97.

B. A. C.		8 47 48	64 59 52
1897.			
Jan.	4	W	64 59 51.73
	5	W	51.26
	21	E	52.13
	22	E	52.06
1897.04		4	64 59 51.79

No. 98.

B. A. C.		8 51 50	15 58 36
1897.			
Jan.	4	W	15 58 35.40
	5	W	35.71
	21	E	35.69
	22	E	36.31
1897.04		4	15 58 35.78

No. 297 L. C.

B. A. C.		20 55 58	75 31 38
1897.			
Jan.	4	W	75 31 37.71
	5	W	37.05
	21	E	36.64
	22	E	37.78
1897.04		4	75 31 37.29

No. 99. κ Urs. Maj.

Boss.		8 56 36	47 33 49.34
1897.			
Jan.	8	W	47 33 49.29
	11	W	49.81
Feb.	24	E	49.42
	25	E	50.08
1897.09		4	47 33 49.65
Obs. – Boss			+0.31
φ			37 20 25.12
φ_o			24.94

No. 100.

Cat.		R. A. h m s	Decl. 1897.0. ° ′ ″
B. A. C.		8 58 4	51 14 3
1897.			
Jan.	4	W	51 14 2.97
	5	W	3.17
	21	E	3.03
	22	E	2.98
1897.04		4	51 14 3.04

No. 101.

B. A. C.		9 1 49	30 4 6
1897.			
Jan.	4	W	30 4 5.32
	5	W	5.09
	21	E	5.23
	22	E	5.80
1897.04		4	30 4 5.36

No. 102.

B. A. C.		9 8 46	54 26 50
1897.			
Jan.	4	W	54 26 49.59
	5	W	49.49
	21	E	49.42
	22	E	49.67
1897.04		4	54 26 49.54

No. 103.

B. A. C.		9 13 14	26 41 9
1897.			
Jan.	8	W	26 41 8.10
	11	W	8.98
Feb.	24	E	8.98
	25	E	8.90
1897.09		4	26 41 8.74

No. 104. α Lyncis.

Boss.		9 14 47	34 49 40.79
1897.			
Jan.	4	W	34 49 40.18
	5	W	40.38
	21	E	40.78
	22	E	40.84
1897.04		4	34 49 40.54
Obs. – Boss			−0.25
φ			37 20 25.86
φ_o			25.68

No. 302 L. C.

Cat.		R. A. h m s	Decl. 1897.0. ° ′ ″
B. A. C.		21 16 50	76 34 42
1897.			
Jan. 4	W		76 34 42.68
5	W		41.66
21	E		42.39
22	E		42.51
1897.04	4		76 34 42.31

No. 105.

B. A. C.		9 18 0	8 9 21
1897.			
Jan. 8	W		8 9 19.26
11	W		19.14
Feb. 24	E		19.35
25	E		19.11
1897.09	4		8 9 19.21

No. 106.

B. A. C.		9 21 55	46 3 8
1897.			
Jan. 4	W		46 3 9.81
5	W		8.84
21	E		10.17
22	E		10.52
1897.04	4		46 3 9.83

No. 108.

B. A. C.		9 23 0	8 38 17
1897.			
Jan. 8	W		8 38 15.69
11	W		15.46
Feb. 24	E		14.91
25	E		14.98
1897.09	4		8 38 15.26

No. 109.

B. A. C.		9 25 10	72 39 47
1897.			
Jan. 4	W		72 39 46.20
5	W		45.90
21	E		46.17
22	E		46.17
1897.04	4		72 39 46.11

No. 304 L. C.

Cat.		R. A. h m s	Decl. 1897.0. ° ′ ″
B. A. C.		21 28 54	75 57 2
1897.			
Jan. 8	W		75 57 3.81
11	W		3.42
Feb. 24	E		3.39
25	E		2.51
1897.09	4		75 57 3 28

No. 110.

B. A. C.		9 31 56	40 42 8
1897.			
Jan. 4	W		40 42 7.44
5	W		7.79
21	E		7.81
22	E		7.95
1897.04	4		40 42 7.75

No. 111.

B. A. C.		9 34 36	−0 40 29
1897.			
Jan. 4	W		−0 40 31.20
5	W		31.11
21	E		30.63
22	E		30.67
1897.04	4		−0 40 30.90

No. 112.

B. A. C.		9 35 37	40 13 38
1897.			
Jan. 8	W		40 13 37.59
11	W		37.87
Feb. 24	E		37.48
25	E		37.73
1897.09	4		40 13 37.67

No. 309 L. C.

B. A. C.		21 41 48	71 50 52
1897.			
Jan. 8	W		71 50 52.12
11	W		53.44
Feb. 24	E		50.72
25	E		51.71
1897.09	4		71 50 52.00

No. 113. μ Leonis.

Cat.		R. A. h m s	Decl. 1897.0. ° ′ ″
Boss.		9 46 54	26 29 31.27
1897.			
Jan. 8	W		26 29 30.90
11	W		30.93
Feb. 24	E		30.93
25	E		30.90
1897.09	4		26 29 30.91
Obs. − Boss			−0.36
φ			37 20 25.79
φ_0			25.61

No. 114.

B. A. C.		9 47 28	35 28 7
1897.			
Jan. 4	W		35 28 5.93
5	W		6.96
21	E		7.36
22	E		7.27
1897.04	4		35 28 6.88

No. 115.

B. A. C.		9 51 27	45 54 18
1897.			
Jan. 4	W		45 54 17.65
5	W		17.40
21	E		18.22
22	E		19.11
1897.04	4		45 54 18.09

No. 116.

B. A. C.		9 57 46	54 23 22
1897.			
Jan. 4	W		54 23 23.55
5	W		23.28
21	E		24.13
22	E		23.75
1897.04	4		54 23 23.68

B. 154. η Leonis.

Boss.		10 1 43	17 15 53.36
1897.			
Jan. 4	W		17 15 53.18
5	W		53.24
8	W		53.35
11	W		53.38
21	E		53.37
22	E		53.52
Feb. 24	E		52.74
25	E		52.51
1897.06	8		17 15 53.16
Obs. − Boss			−0.20
φ			37 20 25.72
φ_0			25.54

No. 316 L. C. Prec.

Cat.		R. A. h m s	Decl. 1897.0. ° ′ ″
B. A. C.		22 1 57	82 22 26
1897.			
Mar. 15	E		82 22 26.27
22	E		26.94
April 5	W		26.79
6	W		25.35
1897.24	4		82 22 26.34

No. 117.

B. A. C.		10 5 6	37 54 33
1897.			
Mar. 23	E		37 54 33.15
24	E		32.86
April 8	W		33.28
9	W		33.18
1897.25	4		37 54 33.12

No. 118. 32 Urs. Maj.

Boss.		10 10 33	65 37 18.95
1897.			
Jan. 4	W		65 37 19.08
5	W		18.84
8	W		19.01
11	W		18.49
21	E		19.91
22	E		19.75
Feb. 24	E		19.23
25	E		19.19
1897.06	8		65 37 19.19
Obs. – Boss			+0.24
φ			37 20 25.29
φ_o			25.11

No. 119. λ Urs. Maj.

Boss.		10 10 53	43 25 43.18
1897.			
Mar. 15	E		43 25 43.28
22	E		43.07
23	E		43.23
24	E		43.04
April 5	W		43.01
6	W		42.87
8	W		43.52
9	W		43.30
1897.24	8		43 25 43.16
Obs. – Boss			– 0.02
φ			37 20 25.70
φ_o			25.42

No. 120.

Cat.		R. A. h m s	Decl. 1897.0. ° ′ ″
B. A. C.		10 14 41	84 46 31
1897.			
Jan. 4	W		84 46 31.13
5	W		31.09
21	E		31.29
22	E		31.11
1897.04	4		84 46 31.15

No. 121.

B. A. C.		10 16 3	41 45 8
1897.			
Mar. 15	E		41 45 7.77
22	E		7.85
April 5	W		8.03
6	W		7.59
1897.24	4		41 45 7.81

No. 122.

B. A. C.		10 16 17	15 29 41
1897.			
Mar. 23	E		15 29 41.30
24	E		41.56
April 8	W		41.24
9	W		41.31
1897.25	4		15 29 41.35

No. 123.

B. A. C.		10 18 14	– 3 33 12
1897.			
Mar. 15	E		– 3 33 13.38
22	E		12.71
April 5	W		12.80
6	W		13.43
1897.24	4		– 3 33 13.08

No. 124.

B. A. C.		10 24 6	39 27 8
1897.			
Mar. 15	E		39 27 7.06
22	E		7.58
April 5	W		7.12
6	W		6.81
1897.24	4		39 27 7.14

No. 125.

Cat.		R. A. h m s	Decl. 1897.0. ° ′ ″
B. A. C.		10 25 1	– 0 6 27
1897.			
Mar. 23	E		– 0 6 31.93
24	E		32.14
April 8	W		31.94
9	W		31.47
1897.25	4		– 0 6 31.87

No. 126.

B. A. C.		10 25 26	81 1 31
1897.			
Mar. 15	E		81 1 30.80
22	E		31.03
April 5	W		30.61
6	W		30.93
1897.24	4		81 1 30.84

No. 127.

B. A. C.		10 34 55	66 15 22
1897.			
Mar. 15	E		66 15 20.98
22	E		20.90
April 5	W		21.12
6	W		20.84
1897.24	4		66 15 20.96

No. 128. 35 H. Urs. Maj.

B. J.		10 35 42	69 36 53.14
1897.			
Mar. 23	E		69 36 52.69
24	E		53.37
April 8	W		53.13
9	W		53.78
1897.25	4		69 36 53.24
P. M.			+0.01
Obs. – B. J.			+0.11

No. 129.

B. A. C.		10 40 58	14 44 18
1897.			
Mar. 15	E		14 44 18.43
22	E		18.43
April 5	W		18.52
6	W		17.69
1897.24	4		14 44 18.27

No. 130. 53 Leonis.

Cat.		R. A. h m s	Decl. 1897.0. ° ′ ″
Boss.		10 43 50	11 5 24.57
1897.			
Mar. 15	E		11 5 24.65
22	E		24.80
23	E		24.67
24	E		24.20
April 5	W		24.76
6	W		24.20
8	W		24.38
9	W		24.48
1897.24	8		11 5 24.52
Obs. – Boss			–0.05
φ			37 20 25.74
φ_o			25.46

No. 131.

B. A. C.		10 47 20	55 7 58
1897.			
Mar. 15	E		55 7 57.64
22	E		57.04
April 5	W		57.27
6	W		57.21
1897.24	4		55 7 57.29

No. 132.

B. A. C.		10 50 26	18 42 6
1897.			
Mar. 23	E		18 42 6.08
24	E		5.48
April 8	W		5.21
9	W		6.30
1897.25	4		18 42 5.77

No. 133.

B. A. C.		10 50 59	26 3 1
1897.			
Mar. 15	E		26 3 0.67
22	E		0.30
April 5.	W		0.11
6	W		0.38
1897.24	4		26 3 0.36

No. 134. α Urs. Maj.

Cat.		R. A. h m s	Decl. 1897.0. ° ′ ″
Boss.		10 57 22	62 18 25.40
1897.			
Mar. 15	E		62 18 25.51
22	E		24.98
23	E		25.50
24	E		25.69
April 5	W		25.38
6	W		25.56
8	W		25.16
9	W		25.80
14	W		25.39
1897.24	9	½(E+W)	62 18 25.44
Obs. – Boss			+0.04
φ			37 20 25.66
φ_o			25.38

No. 135.

B. A. C.		10 59 45	25 45 33
1897.			
Mar. 15	E		25 45 33.23
22	E		33.30
April 5	W		32.87
6	W		32.50
1897.24	4		25 45 32.97

No. 136.

B. A. C.		11 6 45	55 27 14
1897.			
Mar. 15	E		55 27 14.60
22	E		13.73
April 5	W		13.73
6	W		14.32
1897.24	4		55 27 14.09

No. 137. θ Leonis.

Boss.		11 8 50	15 59 33.36
1897.			
Mar. 23	E		15 59 32.57
24	E		32.63
April 8	W		32.43
9	W		33.15
14	W		33.19
1897.26	5	½(E+W)	15 59 32.76
Obs. – Boss			–0.60
φ			37 20 26.30
φ_o			26.02

No. 336 L. C.

Cat.		R. A. h m s	Decl. 1897.0. ° ′ ″
B. A. C.		23 14 10	73 7 33
1897.			
Mar. 15	E		73 7 32.78
22	E		32.83
April 5	W		33.38
6	W		32.14
1897.24	4		73 7 32.78

No. 138. Groom. 1771.

B. J.		11 16 43	64 53 38.77
1897.			
Mar. 23	E		64 53 39.41
24	E		39.07
April 8	W		38.47
9	W		38.78
1897.25	4		64 53 38.93
P. M.			–0.01
Obs. – B. J.			+0.15

No. 139. ι Leonis.

B. J.		11 18 33	11 5 47.92
1897.			
Mar. 15	E		11 5 47.23
22	E		47.58
April 5	W		47.42
6	W		46.91
1897.24	4		11 5 47.28
P. M.			+0.02
Obs. – B. J.			–0.62

No. 140. λ Draconis.

Boss.		11 25 17	69 53 58.25
1897.			
Mar. 15	E		69 53 58.14
22	E		57.90
April 5	W		58.39
6	W		58.48
13	E		57.77
1897.25	5	½(E+W)	69 53 58.19
Obs. – Boss			–0.06
φ			37 20 25.67
φ_o			25.39

No. 141. υ Leonis.

Cat.	R. A.	Decl. 1897.0.
	h m s	° ′ ″
Boss.	11 31 40	−0 15 18.63
1897.		
Mar. 15	E	−0 15 18.80
22	E	18.61
April 5	W	18.78
6	W	18.53
13	E	19.24
1897.25	5 ½(E+W)	−0 15 18.77
Obs. − Boss		−0.14
φ		37 20 25.74
φ_o		25.46

No. 142.

B. A. C.	11 32 18	51 11 20
1897.		
Mar. 23	E	51 11 20.73
24	E	20.50
April 8	W	20.66
9	W	20.49
1897.25	4	51 11 20.59

No. 143.

B. A. C.	11 38 10	42 17 39
1897.		
Mar. 15	E	42 17 38.88
22	E	38.47
April 5	W	38.67
6	W	38.44
1897.24	4	42 17 38.61

No. 144.

B. A. C.	11 38 44	30 9 7
1897.		
Mar. 23	E	30 9 6.49
24	E	5.82
April 8	W	5.74
9	W	6.14
1897.25	4	30 9 6.05

No. 145.

B. A. C.	11 47 2	38 27 26
1897.		
Mar. 15	E	38 27 26.53
22	E	25.64
April 5	W	25.21
6	W	24.94
1897.24	4	38 27 25.58

No. 343 L. C. Groom. 4163.

Cat.	R. A.	Decl. 1897.0.
	h m s	° ′ ″
Boss.	23 49 48	73 50 13.53
1897.		
Mar. 23	E	73 50 12.89
24	E	13.16
April 8	W	12.75
9	W	13.37
14	W	13.30
1897.26	5 ½(E+W)	73 50 13.08
Obs. − Boss		−0.45
φ		37 20 25.25
φ_o		24.97

No. 146.

B. A. C.	11 51 3	42 35 13
1897.		
Mar. 23	E	42 35 12.54
April 5	W	12.70
6	W	12.65
13	E	12.59
1897.26	4	42 35 12.62

No. 147.

B. A. C.	11 54 57	81 25 40
1897.		
Mar. 23	E	81 25 39.49
24	E	40.03
April 8	W	39.41
9	W	39.51
1897.25	4	81 25 39.61

No. 346 L. C.

B. A. C.	23 57 26	82 23 59
1897.		
Mar. 23	E	82 23 58.44
24	E	58.73
April 8	W	58.47
9	W	58.76
14	W	59.43
1897.26	5 ½(E+W)	82 23 58.74

No. 148.

B. A. C.	11 58 19	−4 54 21.
1897.		
Mar. 22	E	−4 54 21.25
April 5	W	21.14
6	W	21.46
13	E	21.78
1897.26		−4 54 21.41

No. 149.

Cat.	R. A.	Decl. 1897.0.
	h m s	° ′ ″
B. A. C.	12 0 28	63 30 32
1897.		
Mar. 23	E	63 30 30.89
24	E	30.90
April 8	W	30.40
9	W	30.18
1897.25	4	63 30 30.59

No. 151.

B. A. C.	12 5 16	17 22 58
1897.		
Mar. 23	E	17 22 56.58
24	E	56.39
April 9	W	56.52
14	W	56.98
1897.26	4	17 22 56.62

No. 152. δ Urs. Maj.

Boss.	12 10 19	57 36 17.71
1897.		
Mar. 23	E	57 36 17.68
24	E	17.71
April 8	W	17.74
9	W	17.37
14	W	17.66
1897.26	5 ½(E+W)	57 36 17.64
Obs. − Boss		−0.07
φ		37 20 25.77
φ_o		25.49

No. 153.

B. A. C.	12 14 7	23 36 24
1897.		
Mar. 22	E	23 36 24.66
April 5	W	24.56
6	W	24.33
13	E	24.12
1897.26	4	23 36 24.42

No. 154.

B. A. C.	12 21 48	28 50 28
1897.		
Mar. 22	E	28 50 27.21
April 5	W	26.48
6	W	26.46
13	E	27.02
1897.26	4	28 50 26.79

No. 155.

Cat.	R. A.	Decl. 1897.0.
	h m s	° ′ ″
B. A. C.	12 25 10	52 6 14
1897.		
Mar. 22	E	52 6 14.31
April 5	W	14.28
6	W	14.20
13	E	14.29
1897.26	4	52 6 14.27

No. 156. 4 Draco.

Boss.	12 25 36	69 46 18.20
1897.		
Mar. 23	E	69 46 18.59
24	E	18.71
April 8	W	19.12
9	W	18.69
1897.25	4	69 46 18.78
Obs. – Boss		+0.58
φ		37 20 25.08
φ_o		24.80

No. 157. $\varkappa$ Draco.

Boss.	12 29 5	70 21 21.23
1897.		
Mar. 22	E	70 21 21.35
April 5	W	21.28
6	W	21.14
13	E	20.93
1897.26	4	70 21 21.17
Obs. – Boss		–0.06
φ		37 20 25.54
φ_o		25.26

No. 158.

B. A. C.	12 36 22	10 59 27
1897.		
Mar. 22	E	10 59 29.04
April 5	W	29.37
6	W	28.20
13	E	28.55
1897.26	4	10 59 28.79

No. 159.

B. A. C.	12 36 40	10 48 11
1897.		
Mar. 23	E	10 48 11.66
24	E	11.09
April 8	W	11.41
9	W	11.26
1897.25	4	10 48 11.35

No. 7 L. C. 21 Cassiop.

Cat.	R. A.	Decl. 1897.0.
	h m s	° ′ ″
Boss.	0 38 50	74 25 30.30
1897.		
Mar. 22	E	74 25 30.19
April 5	W	30.42
6	W	29.39
13	E	29.48
1897.26		74 25 29.87
Obs. – Boss		–0.43
φ		37 20 25.05
φ_o		24.77

No. 160.

B. A. C.	12 42 55	63 20 37
1897.		
Mar. 23	E	63 20 35.88
24	E	36.32
April 8	W	35.89
9	W	35.49
1897.25	4	63 20 35.89

No. 161.

B. A. C.	12 47 5	17 38 3
1897.		
Mar. 22	E	17 38 2.83
April 5	W	2.77
6	W	2.07
13	E	2.87
1897.26	4	17 38 2.63

No. 162.

B. A. C.	12 47 55	–2 59 36
1897.		
Mar. 23	E	–2 59 36.13
24	E	36.41
April 8	W	37.08
9	W	36.88
1897.25	4	–2 59 36.62

No. 163. 32 Cam. fol.

Boss.	12 48 22	83 58 21.60
1897.		
Mar. 22	E	83 58 22.00
April 5	W	21.71
6	W	21.76
13	E	21.84
1897.26	4	83 58 21.83
Obs. – Boss		+0.23
φ		37 20 25.25
φ_o		24.97

No. 164.

Cat.	R. A.	Decl. 1897.0.
	h m s	° ′ ″
B. A. C.	12 57 46	64 9 48
1897.		
Mar. 22	E	64 9 48.83
April 5	W	48.72
6	W	48.56
13	E	48.68
1897.26	4	64 9 48.70

No. 165.

B. A. C.	13 4 44	17 23 51
1897.		
Mar. 22	E	17 23 52.12
April 5	W	52.22
6	W	51.86
13	E	52.09
1897.26	4	17 23 52.07

No. 166.

Boss.	13 9 2	40 41 54.25
1897.		
Mar. 22	E	40 41 53.27
23	E	53.57
24	E	53.72
April 5	W	53.23
6	W	53.12
8	W	53.49
9	W	53.55
13	E	53.20
1897.25	8	40 41 53.39
Obs. – Boss		–0.86
φ		37 20 26.43
φ_o		26.15

No. 167.

B. A. C.	13 15 42	40 41 28
1897.		
Mar. 23	E	40 41 28.18
24	E	27.92
April 8	W	27.98
9	W	28.04
1897.25	4	40 41 28.03

No. 168.

B. A. C.	13 17 58	–4 23 8
1897.		
Mar. 22	E	–4 23 8.86
April 5	W	8.92
6	W	9.03
13	E	9.24
1897.26	4	–4 23 9.01

No. 169.

Cat.	R. A.	Decl. 1897.0.
	h m s	° ′ ″
B. A. C.	13 18 44	85 17 37
1897.		
Mar. 22	E	85 17 35.03
April 5	W	34.83
6	W	34.98
13	E	34.12
1897.26	4	85 17 34.74

No. 14 L. C. α Urs. Min.

Boss.	1 21 18	88 45 30.21
1897.		
Mar. 23	E	88 45 30.86
24	E	29.99
April 8	W	29.87
9	W	30.23
1897.25	4	88 45 30.24
Obs. – Boss		+0.03
φ		37 20 25.69
φ_o		25.41

No. 170. 69 H. Urs. Maj.

B. J.	13 24 40	60 28 39.22
1897.		
Mar. 22	E	60 28 39.76
April 5	W	39.74
6	W	39.67
13	E	39.75
1897.26	4	60 28 39.73
P. M.		0.00
Obs. – B. J.		+0.51

No. 171.

B. A. C.	13 35 45	20 28 36
1897.		
Mar. 22	E	20 28 35.96
April 5	W	35.78
6	W	35.47
13	E	35.38
1897.26	4	20 28 35.65

No. 172.

B. A. C.	13 43 19	−2 19 36
1897.		
Mar. 22	E	−2 19 37.47
April 5	W	37.86
6	W	37.10
13	E	37.59
1897.26	4	−2 19 37.50

No. 173.

Cat.	R. A.	Decl. 1897.0.
	h m s	° ′ ″
B. A. C.	13 45 16	83 16 11
1897.		
Mar. 23	E	83 16 9.70
24	E	9.29
April 8	W	9.63
9	W	9.54
1897.25	4	83 16 9.54

No. 348.

D. M.	13 46 43	61 1 52
1897.		
Mar. 22	E	61 1 50.95
April 5	W	51.54
6	W	50.71
13	E	50.83
1897.26	4	61 1 51.01

No. 174.

Boss.	13 50 29	79 30 13.85
1897.		
Mar. 22	E	79 30 14.54
April 5	W	14.86
6	W	14.60
13	E	14.60
1897.26	4	79 30 14.65
Obs. – Boss		+0.80
φ		37 20 24.69
φ_o		24.41

No. 175.

B. A. C.	13 51 13	1 33 15
1897.		
Mar. 23	E	1 33 15.44
24	E	14.97
April 8	W	15.43
9	W	15.37
1867.25	4	1 33 15.30

B. 209. 11 Bootis.

Boss.	13 56 30	27 53 2.27
1897.		
Mar. 22	E	27 53 2.57
23	E	3.14
24	E	2.65
April 5	W	2.29
6	W	1.67
8	W	1.95
9	W	2.41
13	E	2.81
1897.25	8	27 53 2.43
Obs. – Boss		+0.16
φ		37 20 25.40
φ_o		25.12

No. 176.

Cat.	R. A.	Decl. 1897.0.
	h m s	° ′ ″
B. A. C.	14 1 52	31 20 32
1897.		
May 4	W	31 20 30.80
6	W	30.23
19	E	30.55
20	E	29.78
1897.36	4	31 20 30.34

No. 177.

B. A. C.	14 4 26	49 56 41
1897.		
May 11	W	49 56 42.02
12	W	41.95
13	E	41.28
21	E	41.01
1897.37	4	49 56 41.56

No. 178.

B. A. C.	14 7 3	2 53 38
1897.		
May 4	W	2 53 39.72
6	W	39.73
19	E	39.45
20	E	38.46
1897.36	4	2 53 39.34

No. 179. 4 Urs. Min.

B. J.	14 9 14	78 1 53.68
1897.		
May 11	W	78 1 53.42
12	W	53.59
13	E	53.10
21	E	52.37
1897.37	4	78 1 53.12
P. M.		−0.01
Obs. – B. J.		−0.57

No. 180.

B. A. C.	14 10 15	42 0 8
1897.		
May 4	W	42 0 8.01
6	W	8.60
19	E	8.01
20	E	7.77
1897.36	4	42 0 8.10

No. 181. N. fol.

Cat.		R. A. h m s	Decl. 1897.0. ° ′ ″
B. A. C.		14 15 34	39 16 3
1897.			
May 4	W		39 16 2.39
6	W		2.61
20	E		2.11
21	E		1.75
1897.37	4		39 16 2.21

No. 182.

B. A. C.		14 21 17	38 51 30
1897.			
May 11	W		38 51 30.10
12	W		29.94
13	E		30.30
21	E		30.21
1897.37	4		38 51 30.14

No. 183. 24 Bootis.

Boss.		14 25 2	50 18 20.98
1897.			
May 4	W		50 18 20.70
6	W		20.99
19	E		20.59
20	E		20.21
1897.36	4		50 18 20.62
Obs. – Boss			−0.36
φ			37 20 25.99
φ_o			25.82

No. 184. ρ Bootis.

Boss.		14 27 23	30 49 24.44
1897.			
May 11	W		30 49 24.68
12	W		24.78
13	E		24.50
21	E		24.95
1897.37	4		30 49 24.73
Obs. – Boss			+0.29

No. 349.

B. A. C.		14 29 7	37 24 53
1897.			
May 4	W		37 24 51.05
6	W		50.20
19	E		51.25
20	E		51.03
1897.36	4		37 24 50.88

No. 185.

Cat.		R. A. h m s	Decl. 1897.0. ° ′ ″
B. A. C.		14 30 8	53 21 12
1897.			
May 4	W		53 21 14.18
6	W		14.47
19	E		14.05
20	E		13.78
1897.36	4		53 21 14.12

No. 186.

B. A. C.		14 30 26	37 4 42
1897.			
May 11	W		37 4 42.11
12	W		42.11
13	E		42.27
21	E		42.12
1897.37	4		37 4 42.15

No. 187.

B. A. C.		14 34 20	44 5 11
1897.			
May 4	W		44 5 11.42
6	W		10.98
19	E		10.98
20	E		10.81
1897.36	4		44 5 11.05

No. 188. S. fol.

B. A. C.		14 39 29	61 42 3
1897.			
May 4	W		61 42 3.45
6	W		2.92
19	E		2.66
20	E		2.87
1897.36	4		61 42 2.97

No. 189. ε Bootis fol.

Boss.		14 40 29	27 30 30.11
1897.			
May 11	W		27 30 30.60
12	W		30.45
13	E		30.56
21	E		30.78
1897.37	4		27 30 30.60
Obs. – Boss			+0.49
φ			37 20 25.07
φ_o			24.90

No. 190. N. fol.

Cat.		R. A. h m s	Decl. 1897.0. ° ′ ″
B. A. C.		14 46 38	19 31 41
1897.			
May 4	W		19 31 43.36
6	W		43.28
19	E		42.86
20	E		42.80
1897.36	4		19 31 43.07

No. 191. P. XIV, 221.

B. J.		14 51 21	14 51 45.83
1897.			
May 11	W		14 51 45.37
12	W		45.45
13	E		45.49
21	E		45.28
1897.37	4		14 51 45.40
P. M.			−0.01
Obs. – B. J.			−0.44

No. 350.

B. A. C.		14 52 6	41 33 4
1897.			
May 4	W		41 33 5.12
6	W		5.11
19	E		4.68
20	E		4.35
1897.36	4		41 33 4.81

No. 192.

B. A. C.		14 55 28	40 3 14
1897.			
May 4	W		40 3 14.12
6	W		14.22
19	E		13.55
20	E		13.84
1897.36	4		40 3 13.93

No. 193. 2 H. Urs. Min.

B. J.		14 55 56	66 20 34.60
1897.			
May 11	W		66 20 33.63
12	W		33.32
13	E		33.35
21	E		33.25
1897.37	4		66 20 33.39
P. M.			−0.02
Obs. – B. J.			−1.23

No. 194. β Bootis.

Cat.		R. A. h m s	Decl. 1897.0. ° ′ ″
Boss.		14 58 3	40 47 48.14
1897.			
May 4	W		40 47 48.51
6	W		49.09
19	E		48.29
20	E		48.74
1897.36	4		40 47 48.73
Obs. – Boss			+0.59
φ			37 20 25.03
φ_0			24.86

No. 195. 44 Bootis fol.

Boss.		15 0 23	48 3 19.89
1897.			
May 11	W		48 3 19.36
12	W		19.49
13	E		19.33
21	E		19.26
1897.37	4		48 3 19.36
Obs. – Boss			−0.53
φ			37 20 26.09
φ_0			25.92

No. 196.

B. A. C.		15 6 29	33 28 9
1897.			
May 4	W		33 28 8.08
6	W		7.96
19	E		8.16
20	E		8.01
1897.36	4		33 28 8.05

No. 197.

B. A. C.		15 17 41	33 18 8
1897.			
May 4	W		33 18 8.24
6	W		8.08
19	E		8.52
20	E		7.94
1897.36	4		33 18 8.19

No. 31 L. C.

B. A. C.		3 19 38	71 30 16
1897.			
May 11	W		71 30 17.80
12	W		17.30
13	E		17.10
21	E		16.83
1897.37	4		71 30 17.26

No. 198. μ_1 Bootis.

Cat.		R. A. h m s	Decl. 1897.0. ° ′ ″
Boss.		15 20 36	37 44 18.37
1897.			
May 4	W		37 44 17.77
6	W		17.78
19	E		17.90
20	E		18.18
1897.36	4		37 44 17.91
Obs. – Boss			−0.46
φ			37 20 26.09
φ_0			25.92

No. 199.

Boss.		15 25 48	61 1 31.60
1897.			
May 4	W		61 1 32.46
6	W		32.44
19	E		32.17
20	E		31.80
1897.36	4		61 1 32.22
Obs. – Boss			+0.62
φ			37 20 25.01
φ_0			24.84

No. 200.

B. A. C.		15 26 7	48 4 0
1897.			
May 11	W		48 4 0.65
12	W		0.84
13	E		0.93
21	E		0.82
1897.37	4		48 4 0.81

No. 201.

B. A. C.		15 29 29	64 33 18
1897.			
May 4	W		64 33 18.25
6	W		18.27
19	E		18.57
20	E		18.54
1897.36	4		64 33 18.41

No. 202.

Boss.		15 31 38	43 30 30.90
1897.			
May 11	W		43 30 30.80
12	W		30.93
13	E		31.03
21	E		30.50
1897.37	4		43 30 30.81
Obs. – Boss			−0.09
φ			37 20 25.65
φ_0			25.48

No. 203.

Cat.		R. A. h m s	Decl. 1897.0. ° ′ ″
B. A. C.		15 36 14	16 21 25
1897.			
May 11	W		16 21 24.57
12	W		24.30
13	E		24.49
21	E		24.43
1897.37	4		16 21 24.45

No. 204.

B. A. C.		15 36 57	20 0 7
1897.			
May 4	W		20 0 7.39
6	W		6.95
19	E		7.25
20	E		6.70
1897.36	4		20 0 7.07

No. 205.

B. A. C.		15 38 51	2 50 44
1897.			
May 4	W		2 50 44.03
6	W		43.24
19	E		43.51
20	E		43.26
1897.36	4		2 50 43.51

No. 206.

B. A. C.		15 40 3	52 41 9
1897.			
May 11	W		52 41 9.56
12	W		9.07
13	E		9.31
21	E		9.13
1897.37	4		52 41 9.27

No. 207.

B. A. C.		15 44 20	28 28 23
1897.			
May 11	W		28 28 21.20
12	W		21.52
13	E		21.43
21	E		21.64
1897.37	4		28 28 21.45

No. 208. ζ Urs. Min.

Boss.		15 47 44	78 6 40.70
1897.			
May 4	W		78 6 41.17
6	W		39.99
19	E		40.60
20	E		40.63
1897.36	4		78 6 40.60
Obs. – Boss			−0.10
φ			37 20 25.73
φ_0			25.56

No. 209. χ Herculis.

Cat.		R. A. h m s	Decl. 1897.0. ° ′ ″
Boss.		15 49 6	42 44 22.53
1897.			
May 11	W		42 44 23.39
12	W		23.34
13	E		22.90
21	E		22.90
1897.37	4		42 44 23.13
Obs. – Boss			+0.60
φ			37 20 24.96
φ_0			24.79

No. 210.

B. A. C.		15 52 2	38 14 40
1897.			
May 4	W		38 14 39.86
6	W		39.96
19	E		40.32
20	E		40.34
1897.36	4		38 14 40.12

No. 211.

B. A. C.		15 56 41	72 41 9
1897.			
May 4	W		72 41 12.81
6	W		12.04
19	E		11.10
20	E		11.61
1897.36	4		72 41 11.89

No. 212.

B. A. C.		15 57 27	75 52 9
1897.			
May 11	W		75 52 10.40
12	W		9.68
13	E		10.30
21	E		9.76
1897.37	4		75 52 10.03

No. 213.

B. A. C.		15 58 40	5 16 15
1897.			
May 4	W		5 16 13.93
6	W		13.83
19	E		14.14
20	E		13.58
1897.36	4		5 16 13.87

No. 214.

Cat.		R. A. h m s	Decl. 1897.0. ° ′ ″
B. A. C.		16 3 33	8 48 30
1897.			
May 11	W		8 48 29.47
12	W		29.22
13	E		29.34
21	E		29.30
1897.37	4		8 48 29.33

No. 215.

B. A. C.		16 8 10	5 17 4
1897.			
May 11	W		5 17 4.19
12	W		3.97
13	E		3.62
21	E		3.13
1897.37	4		5 17 3.73

No. 216. 19 Urs. Min.

B. J.		16 13 45	76 8 12.37
1897.			
May 11	W		76 8 13.10
12	W		12.97
13	E		12.95
21	E		12.65
1897.37	4		76 8 12.92
P. M.			0.00
Obs. – B. J.			+0.55

No. 217. γ_2 Herculis.

Boss.		16 17 22	19 23 42.64
1897.			
May 4	W		19 23 41.88
6	W		42.10
11	W		42.08
12	W		41.82
13	E		41.77
19	E		41.98
20	E		41.75
21	E		41.67
1897.37	8		19 23 41.88
Obs. – Boss			–0.76
φ			37 20 26.35
φ_0			26.18

No. 218. η Draco.

Cat.		R. A. h m s	Decl. 1897.0. ° ′ ″
Boss.		16 22 36	61 44 50.15
1897.			
May 4	W		61 44 50.89
6	W		51.01
19	E		50.27
20	E		50.72
1897.36	4		61 44 50.72
Obs. – Boss			+0.57
φ			37 20 25.06
φ_0			24.89

No. 219. 30 Herculis.

Boss.		16 25 15	42 6 30.35
1897.			
May 4	W		42 6 29.70
6	W		29.75
19	E		29.98
20	E		29.84
1897.36	4		42 6 29.82
Obs. – Boss			–0.53
φ			37 20 26.16
φ_0			25.99

No. 220.

Boss.		16 33 10	46 49 18.45
1897.			
May 11	W		46 49 18.13
12	W		17.95
13	E		18.07
21	E		18.17
1897.37	4		46 49 18.08
Obs.—Boss			–0.37
φ			37 20 25.93
φ_0			25.76

No. 221. 42 Herculis.

Boss.		16 35 57	49 7 46.77
1897.			
May 4	W		49 7 46.66
6	W		47.39
19	E		47.09
20	E		47.11
1897.36	4		49 7 47.06
Obs. – Boss			+0.29
φ			37 20 25.34
φ_0			25.17

No. 222. η Herculis.

Cat.	R. A. h m s	Decl. 1897.0. ° ′ ″
Boss.	16 39 21	39 7 5.21
1897.		
May 11	W	39 7 4.91
12	W	5.42
13	E	5.27
21	E	4.99
1897.37	4	39 7 5.15
Obs. – Boss		– 0.06
φ		37 20 25.62
φ_o		25.45

No. 223.

B. A. C.	16 40 3	34 13 43
1897.		
May 4	W	34 13 43.31
6	W	42.70
19	E	43.13
20	E	43.29
1897.36	4	34 13 43.11

No. 224.

Boss.	16 44 45	55 35 31.46
1897.		
May 11	W	55 35 32.91
12	W	32.51
13	E	32.20
21	E	32.34
1897.37	4	55 35 32.49
Obs. – Boss		+ 1.03
φ		37 20 24.53
φ_o		24.36

No. 225. 53 Herculis.

Boss.	16 49 3	31 52 19.70
1897.		
May 4	W	31 52 19.86
6	W	19.64
19	E	19.87
20	E	19.52
1897.36	4	31 52 19.72
Obs. – Boss		+ 0.02
φ		37 20 25.61
φ_o		25.44

No. 44 L. C.

B. A. C.	4 49 15	74 6 33
1897.		
May 11	W	74 6 34.54
12	W	33.91
13	E	34.60
21	E	33.77
1897.37	4	74 6 34.20

No. 226.

Cat.	R. A. h m s	Decl. 1897.0. ° ′ ″
B. A. C.	16 50 49	25 53 48
1897.		
May 4	W	25 53 47.90
6	W	47.66
19	E	48.68
20	E	48.13
1897.36	4	25 53 48.09

No. 227.

B. A. C.	16 53 17	25 30 44
1897.		
May 11	W	25 30 42.68
12	W	42.77
13	E	43.19
21	E	42.93
1897.37	4	25 30 42.89

No. 228. ε Urs. Min.

Boss.	16 56 31	82 12 23.96
1897.		
May 4	W	82 12 24.45
6	W	24.20
19	E	24.44
20	E	24.11
1897.36	4	82 12 24.30
Obs. – Boss		+ 0.34
φ		37 20 25.29
φ_o		25.12

No. 229.

B. A. C.	16 57 28	56 50 22
1897.		
May 11	W	56 50 23.13
12	W	23.04
13	E	22.89
21	E	22.88
1897.37	4	56 50 22.98

No. 230.

B. A. C.	17 2 55	– 0 56 38
1897.		
May 4	W	– 0 56 36.90
6	W	37.15
19	E	36.89
20	E	37.15
1897.36	4	– 0 56 37.02

No. 231.

Cat.	R. A. h m s	Decl. 1897.0. ° ′ ″
B. A. C.	17 4 18	24 37 15
1897.		
May 11	W	24 37 14.81
12	W	14.58
13	E	14.87
21	E	14.22
1897.37	4	24 37 14.62

No. 232.

Boss.	17 5 49	55 53 56.04
1897.		
May 4	W	55 53 55.91
6	W	55.35
19	E	55.51
20	E	55.81
1897.36	4	55 53 55.64
Obs. – Boss		– 0.40
φ		37 20 26.02
φ_o		25.85

No. 50 L. C.

B. A. C.	5 9 56	78 18 35
1897.		
May 11	W	78 18 36.48
12	W	36.72
13	E	35.98
21	E	35.62
1897.37	4	78 18 36.20

No. 233. δ Herculis.

B. J.	17 10 48	24 57 38.38
1897.		
May 4	W	24 57 38.24
6	W	37.98
19	E	38.46
20	E	38.31
1897.36	4	24 57 38.25
P. M.		+ 0.05
Obs. – B. J.		– 0.08

No. 234.

B. A. C.	17 13 31	33 12 40
1897.		
May 4	W	33 12 39.43
6	W	39.19
19	E	39.75
20	E	39.57
1897.36	4	33 12 39.48

No. 235.

Cat.		R. A. h m s	Decl. 1897.0 ° ′ ″
Boss.		17 18 20	40 4 32.56
1897.			
May 4	W		40 4 32.36
6	W		32.13
19	E		33.07
20	E		33.06
1897.36	4		40 4 32.65
Obs. – Boss			+0.09
φ			37 20 25.53
φ_o			25.36

No. 236. 77 Herculis.

Boss.		17 24 0	48 20 46.77
1897.			
May 4	W		48 20 46.45
6	W		46.78
19	E		46.88
20	E		47.08
1897.36	4		48 20 46.80
Obs. – Boss			+0.03
φ			37 20 25.60
φ_o			25.43

No. 53 L. C. Groom. 966.

Boss.		5 25 57	74 58 30.90
1897.			
May 11	W		74 58 31.59
12	W		31.31
13	E		31.04
21	E		30.28
1897.37	4		77 58 31.05
Obs. – Boss			+0.15
φ			37 20 25.72
φ_o			25.55

No. 54 L. C. Groom. 944.

A. E.		5 28 59	85 8 42.23
1897.			
May 4	W		85 8 41.53
6	W		41.33
19	E		41.81
20	E		41.60
1897.36	4		85 8 41.57
P. M.			0.00
Obs. – A. E.			–0.66

No. 237.

B. A. C.		17 29 51	41 18 59
1897.			
May 11	W		41 18 58.17
12	W		58.42
13	E		58.79
21	E		58.33
1897.37	4		41 18 58.43

No. 238. α Oph.

Cat.		R. A. h m s	Decl. 1897.0 ° ′ ″
Boss.		17 30 9	12 38 5.97
1897.			
May 4	W		12 38 5.86
6	W		6.53
19	E		6.16
20	E		6.11
1897.36	4		12 38 6.16
Obs. – Boss			+0.19
φ			37 20 25.43
φ_o			25.26

No. 239. ω Draco.

Boss.		17 37 33	68 48 19.85
1897.			
May 11	W		68 48 19.61
12	W		19.59
13	E		19.98
21	E		19.81
1897.37	4		68 48 19.75
Obs. – Boss			–0.10
φ			37 20 25.66
φ_o			25.49

No. 240.

B. A. C.		17 39 8	24 22 21
1897.			
May 4	W		24 22 20.57
6	W		21.49
19	E		21.54
20	E		21.32
1897.36	4		24 22 21.23

No. 241. ξ Draco.

Boss.		17 51 45	56 53 19.59
1897.			
May 11	W		56 53 19.59
12	W		19.51
13	E		19.65
21	E		19.61
1897.37	4		56 53 19.59
Obs. – Boss			0.00
φ			37 20 25.56
φ_o			25.39

No. 242. 35 Draco.

Boss.		17 54 3	76 58 35.12
1897.			
May 4	W		76 58 34.75
6	W		34.61
19	E		34.97
20	E		35.21
1897.36	4		76 58 34.88
Obs. – Boss			–0.24
φ			37 20 25.86
φ_o			25.69

No. 243.

Cat.		R. A. h m s	Decl. 1897.0 ° ′ ″
B. A. C.		17 55 10	4 22 29
1897.			
May 4	W		4 22 28.64
6	W		28.51
19	E		28.89
20	E		28.07
1897.36	4		4 22 28.53

No. 244.

B. A. C.		17 56 31	1 18 28
1897.			
May 11	W		1 18 27.56
12	W		27.31
13	E		27.39
21	E		26.64
1897.37	4		1 18 27.22

No. 245.

B. A. C.		17 56 58	72 0 53
1897.			
May 4	W		72 0 53.61
6	W		54.30
19	E		54.07
20	E		53.75
1897.36	4		72 0 53.93

No. 246. 72 Oph.

B. J.		18 2 28	9 32 57.24
1896.			
Aug. 7	E		9 32 56.59
10	E		57.35
11	E		56.96
14	E		57.10
19	W		55.99
20	W		56.66
26	W		56.50
27	W		55.80
1896.63	8		56.62
Prec.			+0.21
1897.0			9 32 56.83
P. M.			+0.03
Obs. – B. J.			–0.38

No. 247. 40 Draco. S. prec.

Cat.		R. A. h m s	Decl. 1897.0 ° ′ ″
Boss.		18 7 45	79 59 13.89
1896.			
Aug. 10	E		79 59 13.19
11	E		13.14
12	E		14.00
13	E		13.33
19	W		13.06
20	W		13.35
24	W		13.75
25	W		13.48
1896.63	8		13.41
Prec. + P. M.			+0.80
1897.0			79 59 14.21
Obs. – Boss			+0.32
φ			37 20 24.83
φ_o			25.06

No. 248.

B. A. C.		18 9 39	38 44 42
1896.			
Aug. 7	E		38 44 39.58
14	E		40.15
26	W		39.52
27	W		39.16
1896.64			39.60
Prec.			+0.83
1897.0			38 44 40.43

No. 249. Groom. 2533.

B. J.		18 12 26	42 7 27.26
1896.			
Aug. 10	E		42 7 25.25
11	E		25.38
12	E		25.99
13	E		25.61
19	W		24.89
20	W		25.50
24	W		25.62
25	W		25.33
1896.63	8		25.45
Prec.			+1.09
1897.0			42 7 26.54
P. M.			0.00
Obs. – B. J.			–0.72

No. 250.

B. A. C.		18 15 53	29 37 17
1896.			
Aug. 10	E		29 37 15.19
11	E		16.14
19	W		15.26
20	W		15.96
1896.63	4		15.64
Prec.			+1.39
1897.0			29 37 17.03

No. 251.

B. A. C.		18 15 56	21 55 2
1896.			
Aug. 7	E		21 55 1.67
14	E		2.05
26	W		2.30
27	W		1.49
1896.64	4		1.88
Prec.			+1.39
1897.0			21 55 3.27

No. 252.

B. A. C.		18 17 31	51 18 9
1896.			
Aug. 12	E		51 18 6.96
13	E		6.57
24	W		7.58
25	W		7.26
1896.63	4		7.09
Prec.			+1.53
1897.0			51 18 8.62

No. 253.

B. A. C.		18 19 3	51 15 4
1896.			
Aug. 10	E		51 15 1.36
11	E		1.22
19	W		1.42
20	W		2.00
1896.63	4		1.50
Prec			+1.66
1897.0			51 15 3.16

No. 68 L. C.

B. A. C.		6 24 55	73 46 28
1896.			
Aug. 12	E		73 46 30.54
13	E		30.28
24	W		30.86
25	W		30.48
1896.63	4		30.54
Prec.			–2.17
1897.0			73 46 28.37

No. 254.

B. A. C.		18 25 19	23 47 51
1896.			
Aug. 7	E		23 47 48.61
14	E		49.26
26	W		49.39
27	W		49.74
1896.64	4		49.25
Prec.			+2.21
1897.0			23 47 51.46

No. 255.

Boss.		18 26 16	59 28 49.82
1896.			
Aug. 10	E		59 28 47.05
11	E		47.03
19	W		46.97
20	W		47.04
1896.63	4		47.02
Prec. + P. M.			+2.33
1897.0			59 28 49.35
Obs. – Boss			–0.47
φ			37 20 25.49
φ_o			25.72

No. 256.

B. A. C.		18 30 48	56 57 59
1896.			
Aug. 10	E		56 57 56.71
11	E		57.14
19	W		57.15
20	W		57.63
1896.63	4		57.16
Prec.			+2.69
1897.0			56 57 59.85

No. 257.

B. A. C.		18 37 9	60 36 55
1896.			
Aug. 10	E		60 36 51.10
11	E		51.48
19	W		51.66
20	W		52.04
1896.63	4		51.57
Prec.			+3.24
1897.0			60 36 54.81

No. 258. 110 Herculis.

Boss.		18 41 13	20 26 51.58
1896.			
Aug. 7	E		20 26 48.33
10	E		48.66
11	E		48.01
14	E		48.76
19	W		48.19
20	W		48.49
26	W		49.05
27	W		48.56
1896.63	8		48.50
Prec. + P. M.			+3.24
1897.0			20 26 51.74
Obs. – Boss			+0.16
φ			37 20 24.90
φ_o			25.13

No. 259.

Cat.		R. A. h m s	Decl. 1897.0 ° ′ ″
Boss.		18 44 50	49 19 5.03
1896.			
Aug. 10	E		49 18 58.00
11	E		58.42
12	E		58.74
13	E		58.31
20	W		58.78
24	W		58.78
25	W		58.67
1896.63	7		½ (E+W) 58.55
Prec. + P. M.			+3.92
1897.0			49 19 2.47
Obs. – Boss			–2.56
φ			[37 20 27.72]

No. 260.

Boss.		18 52 4	48 43 50.51
1896.			
Aug. 10	E		48 43 44.86
11	E		45.31
12	E		45.73
13	E		45.53
19	W		45.29
20	W		46.09
24	W		45.73
25	W		45.59
1896.63	8		45.52
Prec. + P. M.			+4.39
1897.0			48 43 49.91
Obs. – Boss			–0.60
φ			37 20 25.76
φ_o			25.99

No. 261. γ Lyrae.

Boss.		18 55 5	32 32 53.28
1896.			
Aug. 10	E		32 32 48.71
11	E		48.71
19	W		48.88
20	W		48.71
1896.63	4		48.75
Prec. + P. M.			+4.76
1897.0			53.51
Obs. – Boss			+0.23
φ			37 20 24.79
φ_o			25.02

No. 262.

Cat.		R. A. h m s	Decl. 1897.0. ° ′ ″
B. A. C.		18 56 7	32 0 2
1896.			
Aug. 7	E		31 59 59.60
14	E		60.02
26	W		59.68
27	W		59.97
1896.64	4		59.82
Prec.			+4.86
1897.0			32 0 4.68

No. 263. ξ Aquilae.

Boss.		19 0 40	13 42 37.23
1896.			
Aug. 7	E		13 42 31.25
14	E		32.11
26	W		31.85
27	W		32.07
1896.64	4		31.82
Prec. + P. M.			+5.14
1897.0			13 42 36.96
Obs. – Boss			–0.27
φ			37 20 25.38
φ_o			25.61

No. 264.

B. A. C.		19 1 2	31 35 28
1896.			
Aug. 10	E		31 35 20.25
11	E		20.45
19	W		20.47
20	W		20.60
1896.63	4		20.44
Prec.			+5.28
1897.0			31 35 25.72

No. 76 L. C.

B. A. C.		7 5 46	81 26 37
1896.			
Aug. 12	E		81 26 44.33
13	E		44.52
24	W		44.28
25	W		44.51
1896.63	4		44.41
Prec.			–5.67
1897.0			81 26 38.74

No. 265. Prec.

Cat.		R. A. h m s	Decl. 1897.0. ° ′ ″
B. A. C.		19 9 25	49 39 39
1896.			
Aug. 11	E		49 39 34.61
12	E		35.06
19	W		35.03
20	W		34.67
1896.63	4		34.84
Prec.			+5.98
1897.0			49 39 40.82

No. 267. δ Draco.

Boss.		19 12 32	67 28 49.22
1896.			
Aug. 12	E		67 28 42.46
13	E		42.84
24	W		42.83
25	W		42.64
1896.64	4		42.69
Prec. + P. M.			+6.33
1897.0			67 28 49.02
Obs. – Boss			–0.20
φ			37 20 25.50
φ_o			25.73

No. 268. θ Lyrae.

B. J.		19 12 47	37 57 0.48
1896.			
Aug. 10	E		37 5 54.10
11	E		55.01
19	W		54.54
20	W		54.20
1896.63	4		54.46
Prec.			+6.26
1897.0			37 57 0.72
P. M.			0.00
Obs. – B. J.			+0.24

No. 269.

B. A. C.		19 12 58	76 23 20
1896.			
Aug. 7	E		76 23 13.67
14	E		13.34
26	W		13.86
27	W		13.91
1896.64	4		13.69
Prec.			+6.28
1897.0			76 23 19.97

No. 270.

Cat.	R. A. h m s	Decl. 1897.0 ° ′ ″
B. A. C.	19 20 40	43 11 13
1896.		
Aug. 10	E	43 11 6.89
11	E	7.04
19	W	7.02
20	W	7.11
1896.63	4	7.01
Prec.		+6.91
1897.0		43 11 13.92

No. 271. ι_2 Cygni.

Boss.	19 27 6	51 30 37.04
1896.		
Aug. 11	E	51 30 28.77
12	E	29.41
19	W	29.41
20	W	29.59
1896.63	4	29.29
Prec. + P. M.		+7.56
1897.0		51 30 36.85
Obs. – Boss		–0.19
φ		37 20 25.31
φ_o		25.54

No. 272.

B. A. C.	19 35 18	29 54 57
1896.		
Aug. 10	E	29 54 48.24
11	E	48.63
19	W	48.96
20	W	48.56
1896.63	4	48.60
Prec.		+8.10
1897.0		29 54 56.70

No. 273.

B. A. C.	19 42 30	33 29 17
1896.		
Aug. 10	E	33 29 7.65
11	E	7.80
19	W	7.95
20	W	7.55
1896.63	4	7.74
Prec.		+8.67
1897.0		33 29 16.41

No. 274.

Cat.	R. A. h m s	Decl. 1897.0 ° ′ ″
B. A. C.	19 43 50	11 33 33
1896.		
Aug. 7	E	11 33 25.31
14	E	25.69
26	W	25.05
27	W	24.78
1896.64	4	25.21
Prec.		+8.77
1897.0		11 33 33.98

No. 275. ε Draco.

Boss.	19 48 31	70 0 20.21
1896.		
Aug. 7	E	70 0 10.67
12	E	10.80
13	E	10.75
14	E	10.59
24	W	11.36
25	W	10.90
26	W	10.35
27	W	11.18
1896.63	8	10.82
Prec. + P. M.		+9.17
1897.0		70 0 19.99
Obs. – Boss		–0.22
φ		37 20 25.42
φ_o		25.65

No. 276.

Boss.	19 49 5	47 39 56.12
1896.		
Aug. 10	E	47 39 47.57
11	E	47.58
19	W	47.72
20	W	47.04
1896.63	4	47.48
Prec. + P. M.		+9.17
1897.0		47 39 56.65
Obs. – Boss		+0.53
φ		37 20 24.50
φ_o		24.73

No. 86 L. C.

B. A. C.	7 52 17	84 21 17
1896.		
Aug. 12	E	84 21 27.61
13	E	27.97
24	W	28.08
25	W	28.16
1896.63	4	27.96
Prec.		–9.43
1897.0		84 21 18.53

No. 277.

Cat.	R. A. h m s	Decl. 1897.0 ° ′ ″
B. A. C.	19 56 6	45 29 28
1896.		
Aug. 10	E	45 29 17.50
11	E	17.79
19	W	17.96
20	W	17.69
1896.63	4	17.73
Prec.		+9.73
1897.0		45 29 27.46

No. 278.

B. A. C.	20 0 35	19 41 45
1896.		
Aug. 7	E	19 41 33.84
26	W	34.46
27	W	34.49
28	E	34.86
1896.64	4	34.41
Prec.		+10.07
1897.0		19 41 44.48

No. 279.

B. A. C.	20 2 32	35 41 20
1896.		
Aug. 10	E	35 41 8.85
11	E	8.98
19	W	8.85
20	W	8.40
1896.63	4	8.77
Prec.		+10.22
1897.0		35 41 18.99

No. 280. 68 Draco.

Boss.	20 9 53	61 45 59.89
1896.		
Aug. 7	E	61 45 48.71
12	E	48.62
13	E	49.36
24	W	49.03
25	W	49.27
26	W	48.99
27	W	48.72
28	E	49.13
1896.64	8	48.98
Prec. + P. M.		+10.84
1897.0		61 45 59.82
Obs. – Boss		–0.07
φ		37 20 25.21
φ_o		25.44

No. 281.

Cat.	R. A. h m s	Decl. 1897.0 ° ′ ″
B. A. C.	20 10 3	46 30 14
1896.		
Aug. 10	E	46 30 3.05
11	E	3.12
19	W	3.19
20	W	2.63
1896.63	4	3.00
Prec.		+10.78
1897.0		46 30 13.78

No. 282.

B. A. C.	20 14 41	34 39 39
1896.		
Aug. 10	E	34 39 27.10
11	E	27.62
19	W	27.76
20	W	27.34
1896.63	4	27.45
Prec.		+11.12
1897.0		34 39 38.57

No. 283.

B. A. C.	20 19 38	68 33 2
1896.		
Aug. 12	E	68 32 51.24
13	E	51.28
24	W	51.40
25	W	51.02
1896.64	4	51.23
Prec.		+11.48
1897.0		68 33 2.71

No. 284. 42 Cygni.

Boss.	20 25 24	36 6 38.86
1896.		
Aug. 7	E	36 6 27.32
10	E	27.00
11	E	27.06
19	W	26.93
20	W	26.82
26	W	27.03
27	W	26.70
28	E	27.25
1896.64	8	27.01
Prec. + P. M.		+11.88
1897.0		36 6 38.89
Obs. – Boss		+0.03
φ		37 20 24.97
φ_o		25.20

No. 285.

Cat.	R. A. h m s	Decl. 1897.0. ° ′ ″
B. A. C.	20 27 4	36 35 19
1896.		
Aug. 12	E	36 35 7.46
13	E	7.77
24	W	7.34
25	W	7.06
1896.64	4	7.41
Prec.		+12.00
1897.0		36 35 19.41

No. 286.

B. A. C.	20 29 4	12 40 28
1896.		
Aug. 10	E	12 40 15.45
11	E	15.56
19	W	15.20
20	W	15.26
1896.63	4	15.37
Prec.		+12.14
1897.0		12 40 27.51

No. 288.

B. A. C.	20 34 8	0 7 28
1896.		
Aug. 10	E	0 7 14.46
11	E	14.41
19	W	15.13
20	W	15.04
1896.63	4	14.76
Prec.		+12.49
1897.0		0 7 27.25

No. 289.

B. A. C.	20 34 43	81 4 12
1896.		
Aug. 12	E	81 3 59.78
13	E	59.45
24	W	60.09
25	W	60.50
1896.64	4	59.96
Prec.		+12.53
1897.0		81 4 12.49

No. 290.

B. A. C.	20 35 54	45 18 9
1896.		
Aug. 7	E	45 17 57.17
26	W	57.16
27	W	56.85
28	E	56.59
1896.64	4	56.94
Prec.		+12.61
1897.0		45 18 9.55

No. 291. α Cygni.

Cat.	R. A. h m s	Decl. 1897.0. ° ′ ″
Boss.	20 37 55	44 54 43.73
1896.		
Aug. 10	E	44 54 31.14
11	E	31.88
19	W	31.30
20	W	30.67
1896.63	4	31.25
Prec. + P. M.		+12.74
1897.0		44 54 43.99
Obs. – Boss		+0.26
φ		37 20 24.77
φ_o		25.00

No. 292.

B. A. C.	20 38 6	60 7 53
1896.		
Aug. 12	E	60 7 45.11
13	E	45.15
24	W	45.19
25	W	44.87
1896.64	4	45.08
Prec.		+12.76
1897.0		60 7 57.84

No. 293. 13 Delph.

Boss.	20 42 42	5 37 47.15
1896.		
Aug. 7	E	5 37 34.05
10	E	34.45
11	E	34.47
19	W	34.27
20	W	34.58
26	W	34.10
27	W	34.17
28	E	33.97
1896.64	8	34.26
Prec. + P. M.		+13.06
1897.0		5 37 47.32
Obs. – Boss		+0.17
φ		37 20 24.83
φ_o		25.06

No. 294 λ Cygni.

B. J.	20 43 23	36 6 44.02
1896.		
Aug. 12	E	36 6 30.40
13	E	30.58
24	W	30.31
25	W	30.38
1896.64	4	30.42
Prec.		+13.12
1897.0		36 6 43.54
P. M.		+0.01
Obs. – B. J.		–0.47

No. 295.

Cat.	R. A. h m s	Decl. 1897.0 ° ′ ″
B. A. C.	20 49 42	44 47 29
1896.		
Aug. 10	E	44 47 15.61
11	E	15.67
19	W	15.53
20	W	15.29
1896.63	4	15.52
Prec.		+13.53
1897.0		44 47 29.05

No. 296.

B. A. C.	20 55 58	39 51 2
1896.		
Aug. 10	E	39 50 48.93
11	E	49.17
19	W	48.84
20	W	48.64
1896.63	4	48.89
Prec.		+13.92
1897.0		39 51 2.81

No. 297.

B. A. C.	20 55 58	75 31 37
1896.		
Aug. 12	E	75 31 23.20
13	E	23.27
24	W	23.93
25	W	23.58
1896.63	4	23.50
Prec.		+13.93
1897.0		75 31 37.43

No. 298.

B. A. C.	21 0 0	41 13 14
1896.		
Aug. 10	E	41 12 59.90
11	E	60.12
19	W	60.11
20	W	60.90
1896.63	4	60.26
Prec.		+14.18
1897.0		41 13 14.44

No. 299. fol.

B. A. C.	21 5 53	22 2 6
1896.		
Aug. 10	E	22 1 51.74
11	E	51.53
19	W	51.70
20	W	51.53
1896.63	4	51.62
Prec.		+14.54
1897.0		22 2 6.16

No. 300. Groom. 3415.

Cat.	R. A. h m s	Decl. 1897.0. ° ′ ″
Boss.	21 9 10	59 33 46.35
1896.		
Aug. 7	E	59 33 31.95
12	E	31.61
13	E	32.01
24	W	31.30
25	W	31.54
26	W	31.31
27	W	31.28
28	E	31.36
1896.64	8	31.54
Prec. + P. M.		+14.73
1897.0		59 33 46.27
Obs. – Boss		–0.08
φ		37 20 25.20
φ_o		25.43

No. 301. α Equulei.

Boss.	21 10 40	4 49 19.32
1896.		
Aug. 10	E	4 49 3.95
11	E	4.15
19	W	3.94
20	W	4.15
1896.63	4	4.05
Prec. + P. M.		+14.74
1897.0		4 49 18.79
Obs. – Boss		–0.53
φ		37 20 25.56
φ_o		25.79

No. 302.

B. A. C.	21 16 50	76 34 42
1896.		
Aug. 12	E	76 34 27.38
13	E	27.35
24	W	27.44
25	W	27.26
1896.63	4	27.36
Prec.		+15.18
1897.0		76 34 42.54

No. 303. 69 Cygni.

Cat.	R. A. h m s	Decl. 1897.0. ° ′ ″
Boss.	21 21 34	36 13 20.03
1896.		
Aug. 7	E	36 13 5.17
10	E	5.08
11	E	5.17
19	W	4.92
20	W	4.65
26	W	4.58
27	W	4.67
28	E	4.57
1896.64	8	4.85
Prec. + P. M		+15.42
1897.0		36 13 20.27
Obs. – Boss		+0.24
φ		37 20 24.76
φ_o		24.99

No. 107 L. C. 1 H. Draco.

Boss.	9 22 24	81 46 53.53
1896.		
Aug. 12	E	81 47 8.57
13	E	9.08
24	W	9.23
25	W	8.67
1896.63	4	8.89
Prec. + P. M.		–15.51
1897.0		81 46 53.38
Obs. – Boss		–0.15
φ		37 20 25.14
φ_o		25.37

No. 109 L. C.

B. A. C.	9 25 10	72 39 46
1896.		
Aug. 12	E	72 39 62.11
13	E	62.10
24	W	[57.30]
25	W	61.01
27	W	60.63
1896.64	4	61.46
Prec.		–15.65
1897.0		72 39 45.81

No. 304.

B. A. C.	21 28 54	75 57 1
1896.		
Aug. 12	E	75 56 46.91
13	E	46.83
24	W	47.03
25	W	46.91
1896 64	4	46.92
Prec.		+15.85
1897.0		75 57 2.77

No. 305.

Cat.		R. A. h m s	Decl. 1897.0 ° ′ ″
B. A. C.		21 29 26	45 23 48
1896.			
Aug. 10	E		45 23 32.73
11	E		33.17
19	W		32.93
20	W		32.80
1896.63	4		32.91
Prec.			+15.88
1897.0			45 23 48.79

No. 306.

B. A. C.		21 33 22	5 18 25
1896.			
Aug. 10	E		5 18 8.16
11	E		8.56
19	W		8.82
20	W		8.86
1896.63	4		8.60
Prec.			+16.09
1897.0			5 18 24.69

No. 307. ε Pegasi.

Boss.		21 39 7	9 24 9.83
1896.			
Aug. 10	E		9 23 53.13
11	E		53.25
19	W		53.20
20	W		52.87
1896.63	4		53.11
Prec. + P. M.			+16.38
1897.0			9 24 9.49
Obs. – Boss			–0.34
φ			37 20 25.36
φ_o			25.59

No. 308. κ Pegasi.

Boss.		21 39 58	25 10 16.95
1896.			
Aug. 7	E		25 10 0.90
26	W		1.10
27	W		1.03
28	E		0.62
1896.64	4		0.91
Prec. + P. M.			+16.41
1897.0			25 10 17.32
Obs. – Boss			+0.37
φ			37 20 24.60
φ_o			24.83

No. 309.

Cat.		R. A. h m s	Decl. 1897.0 ° ′ ″
B. A. C.		21 41 48	71 50 52
1896.			
Aug. 12	E		71 50 35.90
13	E		35.69
24	W		36.20
25	W		36.26
1896.64	4		71 50 36.01
Prec.			+16.52
1897.0			71 50 52.53

No. 310.

B. A. C.		21 45 12	69 40 22
1896.			
Aug. 12	E		69 40 6.17
13	E		6.35
24	W		6.80
25	W		7.03
1896.64	4		6.59
Prec.			+16.68
1897.0			69 40 23.27

No. 311.

B. A. C.		21 51 25	56 7 25
1896.			
Aug. 12	E		56 7 6.79
13	E		6.72
24	W		7.56
25	W		[9.09]
1896.64	4		½ (E + W) 7.16
Prec.			+16.98
1897.0			56 7 24.14

No. 312.

B. A. C.		21 51 54	11 35 14
1896.			
Aug. 10	E		11 34 57.09
11	E		57.02
19	W		56.51
20	W		56.61
1896.63	4		56.81
Prec.			+17.00
1897.0			11 35 13.81

No. 313.

B. A. C.		21 56 4	59 48 15
1896.			
Aug. 7	E		59 47 56.87
26	W		56.45
27	W		56.47
28	E		57.18
1896.64	4		56.74
Prec.			+17.19
1897.0			59 48 13.93

No. 314.

Cat.		R. A. h m s	Decl. 1897.0 ° ′ ″
Boss.		21 58 30	42 19 3.67
1896.			
Aug. 12	E		42 18 43.96
13	E		43.67
24	W		43.94
25	W		43.42
1896.64	4		43.75
Prec. + P. M.			+17.33
1897.0			42 19 1.08
Obs. – Boss			–2.59
φ			[37 57 27.90]

No. 315.

B. A. C.		21 59 29	–1 24 15
1896.			
Aug. 10	E		–1 24 34.61
11	E		33.85
19	W		33.94
20	W		34.38
1896.63	4		–34.19
Prec.			+17.34
1897.0			–1 24 16.85

No. 316.

B. A. C.		22 1 57	82 22 26
1896.			
Sept. 1	E		82 22 9.13
3	E		9.15
16	W		8.59
23	W		9.25
1896.70	4		9.03
Prec.			+17.45
1897.0			82 22 26.48

No. 317. ι Pegasi.

Boss.		22 2 13	24 50 30.68
1896.			
Aug. 10	E		24 50 13.61
11	E		13.33
19	W		13.76
20	W		13.79
Sept. 7	E		13.57
9	E		13.66
25	W		13.94
28	W		13.83
1896.67	8		13.68
Prec. + P. M			+17.47
1897.0			24 50 31.15
Obs. – Boss			+0.47
φ			37 20 24.79
φ_o			25.02

No. 318.

Cat.	R. A.	Decl. 1897.0.
	h m s	° ′ ″
B. A. C.	22 2 59	21 12 6
1896.		
Aug. 7	E	21 11 47.43
26	W	47.50
27	W	47.36
28	E	47.00
1896.64	4	47.32
Prec.		+17.49
1897.0		21 12 4.81

No. 319.

B. A. C.	22 8 17	69 37 24
1896.		
Sept. 1	E	69 37 7.33
3	E	7.68
16	W	7.55
23	W	7.33
1896.70	4	7.47
Prec.		+17.72
1897.0		69 37 25.19

No. 320.

Boss.	22 9 27	39 12 13.41
1896.		
Sept. 7	E	39 11 56.00
9	E	56.10
25	W	56.45
28	W	56.32
1896.72	4	56.22
Prec. + P. M.		+17.75
1897.0		39 12 13.97
Obs. – Boss		+0.56
φ		37 20 24.95
φ_o		25.18

No. 321.

B. A. C.	22 11 14	56 31 48
1896.		
Sept. 1	E	56 31 30.02
3	E	29.57
16	W	29.24
23	W	29.67
1896.70	4	29.62
Prec.		+17.84
1897.0		56 31 47.46

No. 120 L. C.

Cat.	R. A.	Decl. 1897.0.
	h m s	° ′ ″
B. A. C.	10 14 41	84 46 31
1897.		
Sept. 3	E	84 46 48.93
10	E	48.81
16	W	49.33
23	W	49.76
1896.70	4	49.21
Prec.		–17.97
1897.0		84 46 31.24

No. 322. 31 Pegasi.

B. J.	22 16 26	11 41 10.14
1896.		
Sept. 7	E	11 40 52.25
9	E	52.09
25	W	52.48
28	W	52.35
1896.72	4	52.29
Prec.		+18.04
1897.0		11 41 10.33
P. M.		0.00
Obs. – B. J.		+0.19

No. 323. 4 Lacer.

Boss.	22 20 20	48 57 13.46
1896.		
Sept. 1	E	48 56 56.83
3	E	56.68
7	E	56.17
9	E	56.61
16	W	56.44
23	W	56.14
25	W	56.89
28	W	56.38
1896.71	8	56.52
Prec. + P. M.		+18.16
1897.0		48 57 14.68
Obs. – Boss		+1.22
φ		[37 20 24.24]
φ_o		24.47

No. 126 L. C.

B. A. C.	10 25 26	81 1 31
1896.		
Sept. 1	E	81 1 49.00
3	E	48.82
16	W	49.32
23	W	49.88
1896.70	4	49.25
Prec.		–18.37
1897.0		81 1 30.88

No. 324. 38 Pegasi.

Cat.	R. A.	Decl. 1897.0.
	h m s	° ′ ″
Boss.	22 25 19	32 2 43.54
1896.		
Sept. 7	E	32 2 24.76
9	E	24.93
25	W	25.48
28	W	24.89
1896.72	4	25.01
Prec. + P. M.		+18.35
1897.0		32 2 43.36
Obs. – Boss		–0.18
φ		37 20 25.68
φ_o		25.91

No. 325.

Boss.	22 31 36	49 32 15.45
1896.		
Sept. 1	E	49 31 55.70
3	E	55.61
7	E	55.43
9	E	55.82
16	W	55.69
23	W	55.60
25	W	55.98
28	W	56.20
1896.71	8	55.75
Prec. + P. M.		+18.60
1897.0		49 32 14.35
Obs. – Boss		–1.10
φ		37 20 26.56
φ_o		26.79

No. 326.

B. A. C.	22 36 52	39 41 14
1896.		
Sept. 7	E	39 40 55.23
9	E	55.30
25	W	55.60
28	W	55.69
1896.72	4	55.45
Prec.		+18.75
1897.0		39 41 14.20

No. 327. 13 Lacer.

B. J.	22 39 29	41 16 42.81
1896.		
Sept. 1	E	41 16 24.83
3	E	24.00
16	W	24.16
23	W	23.99
1896.70	4	24.24
Prec.		+18.83
1897.0		41 16 43.07
P. M.		0.00
Obs. – B. J.		+0.26

No. 328. 14 Lacer.

Cat.		R. A. h m s	Decl. 1897.0 ° ′ ″
Boss.		22 45 42	41 24 28.79
1896.			
Sept. 1	E		41 24 9.73
3	E		9.51
16	W		9.21
23	W		9.55
1896.70	4		9.50
Prec. + P. M.			+19.00
1897.0			41 24 28.50
Obs. − Boss			−0.29
φ			37 20 25.70
φ_o			25.93

No. 329.

B. A. C.		22 48 28	39 37 11
1896.			
Sept. 7	E		39 36 52.47
9	E		52.55
25	W		52.94
28	W		52.96
1896.72	4		52.73
Prec.			+19.08
1897.0			39 37 11.81

No. 330.

Boss.		22 57 9	56 33 6.64
1896.			
Sept. 1	E		56 32 48.37
3	E		47.83
16	W		47.76
23	W		48.14
1896.70	4		48.02
Prec. + P. M.			+19.28
1897.0			56 33 7.30
Obs. − Boss			+0.66
φ			37 20 24.75
φ_o			24.98

No. 331. α Pegasi.

Boss.		22 59 37	14 39 3.59
1896.			
Sept. 7	E		14 38 44.32
9	E		44.04
25	W		44.12
28	W		44.14
1896.72	4		44.15
Prec. + P. M.			+19.31
1897.0			14 39 3.46
Obs. − Boss			−0.13
φ			37 20 25.63
φ_o			25.86

No. 332.

B. A. C.		23 2 6	24 54 44
1896.			
Sept. 1	E		24 54 25.16
3	E		24.65
16	W		24.61
23	W		25.10
1896.70	4		24.88
Prec.			+19.42
1897.0			24 54 44.30

No. 333.

B. A. C.		23 5 52	66 40 58
1896.			
Sept. 1	E		66 40 39.17
3	E		38.80
16	W		38.54
23	W		38.77
1896.70	4		38.82
Prec.			+19.50
1897.0			66 40 58.32

No. 334.

B. A. C.		23 6 32	8 9 39
1896.			
Sept. 7	E		8 9 19.17
9	E		19.50
25	W		19.42
28	W		19.94
1896.72	4		19.51
Prec.			+19.51
1897.0			8 9 39.02

No. 335. Br. 3077.

Boss.		23 8 19	56 35 57.44
1896.			
Sept. 1	E		56 35 39.09
3	E		38.72
16	W		38.98
23	W		39.04
1896.70	4		38.96
Prec. + P. M.			+19.81
1897.0			56 35 58.77
Obs. − Boss			+1.33
φ			37 20 24.09
φ_o			24.32

No. 336.

B. A. C.		23 14 10	73 7 33
1896.			
Sept. 1	E		73 7 13.69
3	E		13.48
16	W		13.40
23	W		13.65
1896.70	4		13.55
Prec.			+19.65
1897.0			73 7 33.20

No. 337.

B. A. C.		23 26 13	38 40 14
1896.			
Sept. 7	E		38 39 53.24
9	E		53.69
25	W		53.31
28	W		53.30
1896.72	4		53.38
Prec.			+19.84
1897.0			38 40 13.22

No. 338. ι Androm.

Boss.		23 33 5	42 41 52.16
1896.			
Sept. 1	E		42 41 32.10
3	E		32.27
7	E		32.55
9	E		32.25
16	W		31.66
23	W		31.83
25	W		32.57
28	W		32.35
1896.71	8		32.20
Prec. + P. M.			+19.91
1897.0			42 41 52.11
Obs. − Boss			−0.05
φ			37 20 25.51
φ_o			25.74

No. 339.

B. A. C.		23 38 5	52 34 52
1896.			
Sept. 7	E		52 34 32.18
9	E		32.14
25	W		32.31
28	W		32.59
1896.72			32.30
Prec.			+19.96
1897.0			52 34 52.26

No. 340.

Cat.	R. A.			Decl. 1897.0.		
	h	m	s	°	′	″
B. A. C.	23	42	56	7	40	26
1896.						
Sept. 7	E			7	40	6.20
9	E					6.19
25	W					6.80
28	W					6.37
1896.72	4					6.39
Prec.						+20.00
1897.0				7	40	26.39

No. 341.

B. A. C.	23	44	26	28	16	8
1896.						
Sept. 1	E			28	15	49.02
3	E					48.71
16	W					47.58
23	W					48.12
1896.70	4					48.36
Prec.						+20.01
1897.0				28	16	8.37

No. 342. ρ Cassiop.

B. J.	23	49	14	56	55	34.04
1896.						
Sept. 1	E			56	55	14.67
3	E					14.87
16	W					14.14
23	W					14.61
1896.70						14.57
Prec.						+20.03
1897.0						34.60
P. M.						0.00
Obs. – B. J.						+0.56

No. 344.

Cat.	R. A.			Decl. 1897.0.		
	h	m	s	°	′	″
B. A. C.	23	50	24	56	50	19
1896.						
Sept. 7	E			56	49	60.07
9	E					59.51
25	W					60.28
28	W					60.46
1896.72	4					60.08
Prec.						+20.03
1897.0				56	50	20.11

No. 345. ψ Pegasi.

Boss.	23	52	30	24	34	7.64
1896.						
Sept. 1	E			24	33	47.67
3	E					48.47
16	W					47.95
23	W					48.21
1896.70	4					48.07
Prec. + P. M.						+20.00
1897.0				24	34	8.07
Obs. – Boss						+0.43
φ				37	20	24.98
φ_0						25.21

No. 147 L. C.

B. A. C.	11	54	57	81	25	40
1896.						
Sept. 1	E			81	25	59.42
3	E					59.33
16	W					59.77
23	W					59.43
29	W					59.44
1896.70	5			½ (E+W)		59.46
Prec.						–20.05
1897.0				81	25	39.41

No. 346.

Cat.	R. A.			Decl. 1897.0.		
	h	m	s	°	′	″
B. A. C.	23	57	26	82	23	59
1896.						
Sept. 1	E			82	23	39.04
3	E					39.54
16	W					39.35
23	W					38.51
29	W					38.73
1896.70	5			½ (E+W)		39.07
Prec.						+20.05
1897.0				82	23	59.12

No. 149 L. C.

B. A. C.	11	59	36	86	9	27
1896.						
Sept. 1	E			86	9	48.67
3	E					48.64
16	W					48.72
23	W					48.21
29	W					47.91
1896.70	5			½ (E+W)		48.46
Prec.						–20.05
1897.0				86	9	28.41

No. 347.

B. A. C.	23	59	47	–1	4	30
1896.						
Sept. 7	E			–1	4	50.75
9	E					50.56
25	W					50.30
28	W					50.55
1896.72	4					–50.54
Prec.						+20.05
1897.0				–1	4	30.49

(9) **The Observed Declinations.** The list gives the current observing number D, and the number from Boss under B. The approximate Right Ascension for 1897 is given, and the epoch of the observations. The Observed Declination, number of determinations, and the Precession for 1897, complete the page. Proper motions have not been included in these results, except for the stars from Boss, where the correction, necessary to reduce to 1897.0, has been applied.*

The Latitude observations, for which these stars were used, were made with the zenith telescope of the Sayre Observatory of Lehigh University.

*The star ρ Boötis, $14^h\ 27^m + 30°\ 49'$, may be noted as an instance of the divergence of the Declinations of the American Ephemeris, from those of Boss. The proper motion of the last is +0″.113 and of A. E. +0″.103; and the Declinations differ 0″.13 for 1897.0.

D.	B.	R. A.	Epoch	Decl. 1897.0	Obs	Precess.	D.	B.	R. A.	Epoch	Decl. 1897.0	Obs.	Precess.
		h m s		° ′ ″		″			h m s		° ′ ″		″
1	. .	0 4 58	1896.72	45 29 56.80	4	+20.047	56	. .	5 34 22	1896.88	−3 37 20.71	4	+2.237
2	. .	11 20	96.72	35 55 3.43	4	.028	57	. .	40 49	96.88	15 46 55.38	4	1.675
3	. .	11 42	96.70	38 6 34.92	5	.026	58	. .	41 50	96.96	68 26 27.95	4	.586
4	. .	13 16	96.70	43 13 8.46	5	.018	59	. .	43 45	96.88	12 37 6.33	4	.421
5	. .	22 36	96.72	18 56 40.30	4	19.955	60	. .	46 30	96.88	14 8 43.54	4	.179
6	8	27 7	96.72	62 21 47.75	4	.912	356	107	49 35	96.88	7 23 15.60	4	0.910
7	15	38 50	96.98	74 25 29.83	9	.765	61	. .	50 7	96.96	67 0 12.42	4	.864
8	. .	43 20	96.72	7 1 28.48	4	.695	62	. .	55 52	96.96	42 54 52.17	4	.362
9	22	51 1	96.71	37 56 26.41	8	.557	63	. .	59 29	96.88	38 29 30.11	4	+0.045
10	. .	1 2 5	96.72	43 23 35.70	4	.321	64	. .	6 3 19	97.04	22 12 23.20	4	−0.290
11	. .	7 37	96.72	−7 19 47.60	4	.187	357	112	8 39	97.09	22 32 11.38	8	.758
12	. .	14 11	96.72	64 7 4.68	4	.011	65	. .	10 32	97.04	59 2 52.50	4	.922
13	. .	18 18	96.72	17 16 53.35	4	18.893	358	113	16 43	97.04	22 33 58.64	4	1.462
14	28	21 18	96.98	88 45 30.23	8	.804	66	. .	17 49	97.09	58 28 23.11	4	.557
15	32	23 33	96.71	69 44 3.95	4	.734	67	. .	24 8	97.04	22 36 47.41	4	2.108
16	. .	27 5	96.72	11 21 9.98	4	.622	68	. .	24 55	96.80	73 46 28.36	8	.176
17	. .	30 44	96.71	40 53 24.89	4	.501	69	. .	27 20	97.09	7 24 29.25	4	.386
18	. .	34 29	96.72	40 3 19.04	4	.372	70	. .	29 28	97.04	38 31 41.82	4	.571
19	. .	51 43	96.72	17 18 53.04	4	17.717	71	. .	31 58	97.09	42 34 45.32	4	.788
20	45	55 22	96.72	63 53 32.91	7	.565	[3]72	. .	37 7	97.09	59 32 43.83	4	3.233
21	48	2 3 25	96.77	34 30 0.19	10	.214	359	116	37 35	97.04	25 13 58.41	4	.275
22	. .	12 37	96.87	46 54 15.83	4	16.788	73	. .	45 23	97.04	21 52 56.85	4	.945
[1]23	50	20 33	96.87	66 56 21.20	4	.397	360	118	46 0	97.09	34 5 6.51	4	.998
24	. .	27 15	96.87	14 34 42.26	4	.054	361	117	52 15	97.06	87 12 34.44	8	4.532
25	. .	35 40	96.87	54 39 58.37	4	15.602	74	. .	56 57	97.09	29 30 34.81	4	.932
26	58	43 55	96.87	26 50 9.06	4	.138	75	. .	7 5 21	97.04	51 35 57.21	4	5.641
27	. .	53 0	96.87	40 37 20.09	4	14.606	76	. .	5 46	96.83	81 26 38.64	8	.677
28	65	3 1 27	96.87	40 33 31.30	4	.088	77	. .	6 36	97.09	−0 19 21.27	3	.745
29	. .	4 38	96.87	39 13 12.50	4	13.890	78	. .	9 42	97.04	59 6 4.46	4	6.005
30	. .	8 5	96.87	42 7 7.69	4	.669	[4]79	123	13 58	97.04	22 10 18.57	4	.361
31	. .	19 38	97.12	71 30 17.24	8	12.914	80	124	20 9	97.06	68 40 32.69	8	.872
32	72	21 35	96.87	9 22 24.73	4	.783	81	. .	24 3	97.04	12 13 9.63	4	7.190
33	. .	33 35	96.87	16 12 5.17	4	11.956	82	. .	29 2	97.04	46 24 25.47	4	.596
34	. .	40 4	96.87	65 12 26.34	4	.496	83	. .	32 26	97.04	34 49 13.30	4	.871
35	. .	50 47	96.87	22 10 52.17	4	10.716	84	128	38 14	97.06	24 38 41.15	8	8.334
36	. .	55 51	96.87	58 52 8.47	4	.338	85	. .	48 5	97.04	56 46 29.73	4	9.111
37	. .	4 3 9	96.87	19 20 12.15	4	9.786	86	. .	52 17	96.83	84 21 18.28	8	.436
351	85	7 19	96.96	48 8 50.68	4	.466	87	. .	54 35	97.09	−3 23 56.58	4	.613
38	. .	7 48	96.87	61 35 27.39	4	.430	88	. .	57 46	97.04	22 21 33.57	4	.857
39	. .	11 28	96.87	49 47 50.49	4	.144	89	. .	8 1 36	97.09	58 32 58.21	4	10.148
352	86	13 55	96.88	15 22 43.33	5	8.953	90	. .	13 48	97.04	27 33 3.94	4	11.053
40	. .	19 32	96.88	31 12 22.52	4	.512	91	. .	16 1	97.09	53 33 4.38	4	.214
353	87	22 36	96.88	18 57 6.16	4	.268	92	135	21 43	97.06	61 3 44.45	8	.624
41	. .	31 47	96.96	52 52 26.79	4	7.529	93	. .	29 23	97.04	19 56 38.68	4	12.166
42	. .	34 52	96.88	28 24 54.94	5	.279	94	136	38 49	97.04	18 31 57.80	4	.811
354	89	39 25	96.96	56 34 26.27	4	6.906	95	. .	44 8	97.04	33 40 11.39	4	13.164
43	. .	44 14	96.88	6 46 52.68	5	.509	96	. .	44 53	97.09	62 20 50.79	4	.215
44	. .	49 15	97.13	74 6 34.38	8	.092	97	. .	47 48	97.04	64 59 51.79	4	.405
45	92	54 14	96.88	60 17 29.18	4	5.674	98	. .	51 49	97.04	15 58 35.78	4	.665
46	. .	58 13	96.88	21 7 59.79	4	.340	99	140	56 35	97.09	47 33 49.65	4	.967
47	. .	5 1 21	96.88	18 30 23.81	4	.076	100	. .	58 4	97.04	51 14 3.04	4	14.059
48	. .	3 56	96.96	62 33 49.72	4	4.857	101	. .	9 1 49	97.04	30 4 5.36	4	.291
49	. .	7 54	96.88	2 44 18.60	4	.519	102	. .	8 46	97.04	54 26 49.54	4	.711
50	. .	9 55	97.16	78 18 36.07	8	.344	103	. .	13 14	97.09	26 41 8.74	4	.973
[2]51	. .	10 43	96.88	18 19 27.38	4	.279	104	144	14 47	97.04	34 49 40.54	4	15.064
52	. .	19 36	96.88	6 15 22.40	4	3.516	105	. .	18 0	97.09	8 9 19.21	4	.248
53	100	25 57	97.14	74 58 30.96	11	2.967	106	. .	21 54	97.04	46 3 9.83	4	.468
54	. .	28 59	97.12	85 8 41.62	8	.705	107	146	22 24	96.63	81 46 53.38	4	.497
355	103	30 59	96.88	−1 16 4.51	4	.532	108	. .	23 0	97.09	8 38 15.26	4	.528
55	. .	32 7	96.96	65 38 28.71	4	.434	109	. .	25 10	96.84	72 39 45.96	8	.648

[1] Dup: mean. [2] Dup: mean. [3] Close dup: mean. [4] Wide dup: principal star.

D.	B.	R. A.	Epoch	Decl. 1897.0	Obs.	Precess.
		h m s		° ′ ″		″
110	. .	9 31 56	1897.04	40 42 7.75	4	−16.011
111	. .	34 36	97.04	−0 40 30.90	4	.151
112	. .	35 37	97.09	40 13 37.67	4	.203
113	153	46 54	97.09	26 29 30.91	4	.765
114	. .	47 28	97.04	35 28 6.88	4	.792
115	. .	51 27	97.04	45 54 18.09	4	.980
116	. .	57 46	97.04	54 23 23.68	4	17.268
362	154	10 1 43	97.06	17 15 53.16	8	.440
117	. .	5 6	97.25	37 54 33.12	4	.585
118	156	10 33	97.06	65 37 19.19	8	.809
119	157	10 53	97.24	43 25 43.16	8	.822
120	. .	14 41	96.87	84 46 31.19	8	.972
121	. .	16 3	97.24	41 45 7.81	4	18.025
122	. .	16 17	97.25	15 29 41.35	4	.033
123	. .	18 14	97.24	−3 33 13.08	4	.108
124	. .	24 6	97.24	39 27 7.14	4	.322
125	. .	25 1	97.25	−0 6 31.87	4	.355
126	. .	25 25	96.97	81 1 30.86	8	.370
127	. .	34 55	97.24	66 15 20.96	4	.687
128	. .	35 42	97.25	69 36 53.24	4	.711
129	. .	40 58	97.24	14 44 18.27	4	.872
130	163	43 50	97.24	11 5 24.52	8	.955
131	. .	47 20	97.24	55 7 57.29	4	19.053
132	. .	50 26	97.25	18 42 5.77	4	.136
133	. .	50 59	97.24	26 3 0.36	4	.150
134	165	57 22	97.24	62 18 25.44	9	.308
135	. .	59 45	97.24	25 45 32.97	4	.363
136	. .	11 6 45	97.24	55 27 14.09	4	.513
137	168	8 50	97.26	15 59 32.76	5	.555
138	. .	16 44	97.25	64 53 38.93	4	.697
[5]139	. .	18 33	97.24	11 5 47.28	4	.725
140	172	25 17	97.25	69 53 58.19	5	.823
141	173	31 40	97.25	−0 15 18.77	5	.899
142	. .	32 18	97.25	51 11 20.59	4	.907
143	. .	38 10	97.24	42 17 38.61	4	.961
144	. .	38 44	97.25	30 9 6.05	4	.967
145	. .	47 2	97.24	38 27 25.58	4	20.020
146	. .	51 3	97.26	42 35 12.62	4	.037
147	. .	54 57	96.98	81 25 39.51	9	.047
148	. .	58 19	97.26	−4 54 21.41	4	.052
149	. .	59 36	96.98	86 9 28.53	9	.052
150	. .	12 0 28	97.25	63 30 30.59	4	.052
151	. .	5 16	97.26	17 22 56.62	4	.047
152	180	10 19	97.26	57 36 17.64	5	.032
153	. .	14 7	97.26	23 36 24.42	4	.013
154	. .	21 48	97.26	28 50 26.79	4	19.952
155	. .	25 10	97.26	52 6 14.27	4	.931
156	185	25 36	97.25	69 46 18.78	4	.927
157	187	29 5	96.98	70 21 21.16	9	.891
158	. .	36 22	97.26	10 59 28.79	4	800
159	. .	36 40	97.25	10 48 11.36	4	.796
160	. .	42 55	97.25	63 20 35.89	4	.702
161	. .	47 4	97.26	17 38 2.63	4	.631
162	. .	47 55	97.25	−2 59 36.62	4	.614
[6]163	189	48 21	96.99	83 58 21.88	8	.607
164	. .	57 45	97.26	64 9 48.70	4	.419
165	. .	13 4 43	97.26	17 23 52.07	4	.258
166	195	9 2	97.25	40 41 53.39	8	.149
167	. .	15 42	97.25	40 41 28.03	4	18.968
168	. .	17 58	97.26	−4 23 9.01	4	.903

D.	B.	R. A.	Epoch	Decl. 1897.0	Obs.	Precess.
		h m s		° ′ ″		″
169	. .	13 18 44	1896.99	85 17 34.72	8	−18.881
170	. .	24 40	97.26	60 28 39.73	4	.700
[7]171	. .	35 45	97.26	20 28 35.65	4	.328
172	. .	43 19	97.26	−2 19 37.50	4	.049
173	. .	45 16	96.98	83 16 9.20	8	17.974
348	. .	46 43	97.26	61 1 51.01	4	.917
174	207	50 28	97.02	79 30 14.67	12	.767
175	. .	51 13	97.25	1 33 15.30	4	.738
363	209	56 30	97.25	27 53 2.43	8	.517
176	. .	14 1 52	97.36	31 20 30.34	4	.284
177	. .	4 26	97.37	49 56 41.56	4	.169
178	. .	7 3	97.36	2 53 39.34	4	.050
179	. .	9 14	97.12	78 1 53.31	8	16.947
180	. .	10 14	97.36	42 0 8.10	4	.900
181	. .	15 33	97.37	39 16 2.21	4	.646
182	. .	21 16	97.37	38 51 30.13	4	.361
183	216	25 3	97.36	50 18 20.62	4	.169
184	. .	27 23	97.37	30 49 24.73	4	.047
349	. .	29 7	97.36	37 24 50.88	4	15.956
185	. .	30 7	97.36	53 21 14.12	4	.901
186	. .	30 25	97.37	37 4 42.15	4	.886
187	. .	34 20	97.36	44 5 11.05	4	.675
[8]188	. .	39 28	97.36	61 42 2.97	4	.390
[9]189	223	40 29	97.37	27 30 30.60	4	.333
[10]190	. .	46 38	97.36	19 31 43.07	4	14.982
191	. .	51 21	97.37	14 51 45.40	4	.703
350	. .	52 6	97.36	41 33 4.81	4	.660
192	. .	55 28	97.36	40 3 13.93	4	.457
193	. .	55 56	97.37	66 20 33.39	4	.427
194	229	58 3	97.36	40 47 48.73	4	.298
[11]195	230	15 0 24	97.37	48 3 19.36	4	.155
196	. .	6 28	97.36	33 28 8.05	4	13.772
197	. .	17 40	97.36	33 18 8.19	4	.044
198	235	20 36	97.36	37 44 17.91	4	12.849
199	239	25 48	97.36	61 1 32.22	4	.496
200	. .	26 6	97.37	48 4 0.76	4	.475
201	. .	29 28	97.36	64 33 18.41	4	.243
202	244	31 38	97.37	43 30 30.81	4	.093
203	. .	36 14	97.37	16 21 24.45	4	11.770
204	. .	36 57	97.36	20 0 7.07	4	.719
205	. .	38 51	97.36	2 50 43.51	4	.584
206	. .	40 3	97.37	52 41 9.27	4	.498
207	. .	44 19	97.37	28 28 21.45	4	.189
208	252	47 43	97.13	78 6 40.65	13	10.940
209	251	49 6	97.37	42 44 23.13	4	.839
210	. .	52 2	97.36	38 14 40.12	4	.624
211	. .	56 40	97.16	72 41 11.58	8	.276
212	. .	57 27	97.12	75 52 9.72	8	.219
213	. .	58 39	97.36	5 16 13.87	4	.127
214	. .	16 3 32	97.37	8 48 29.33	4	9.756
215	. .	8 9	97.37	5 17 3.73	4	.401
216	. .	13 45	97.16	76 8 12.83	8	8.966
217	267	17 22	97.37	19 23 41.88	8	.682
218	272	22 35	97.36	61 44 50.72	4	.268
219	273	25 15	97.36	42 6 29.82	4	.055
220	280	33 10	97.37	46 49 18.08	4	7.416
221	281	35 57	97.36	49 7 47.06	4	.190
222	284	39 22	97.37	39 7 5.15	4	6.911
223	. .	40 3	97.36	34 13 43.11	4	.854
224	288	44 44	97.37	55 35 32.49	4	.466

[5] Dup: principal star. [6] Fol. star. [7] Dup: principal star. [8] Dup: fol. star. [9] Dup: fol. star.
[10] Dup: fol. star. [11] Dup: fol. star.

D.	B.	R. A.	Epoch.	Decl. 1897.0	Obs.	Precess.
		h m s		° ′ ″		
225	289	16 49 3	1897.36	31 52 19.72	4	−6.108
226	. .	50 48	97.36	25 53 48.09	4	5.962
227	. .	53 16	97.37	25 30 42.89	4	.755
228	294	56 31	97.16	82 12 24.06	8	.484
229	. .	57 28	97.37	56 50 22.98	4	.404
230	. .	17 2 55	97.36	−0 56 37.02	4	4.943
231	. .	4 17	97.37	24 37 14.62	4	.826
232	297	5 49	97.36	55 53 55.64	4	.696
233	. .	10 47	97.36	24 57 38.25	4	.271
234	. .	13 31	97.36	33 12 39.48	4	.039
235	303	18 20	97.36	40 4 32.65	4	3.624
236	306	24 0	97.36	48 20 46.80	4	.138
237	. .	29 50	97.37	41 18 58.43	4	2.630
238	309	30 9	97.36	12 38 6.16	4	.604
239	311	37 33	97.37	68 48 19.75	4	1.962
240	. .	39 7	97.36	24 22 21.23	4	.823
241	318	51 45	97.37	56 53 19.59	4	0.722
242	321	54 3	97.12	76 58 34.76	8	.520
243	. .	55 9	97.36	4 22 28.53	4	.423
244	. .	56 31	97.37	1 18 27.22	4	.305
245	. .	56 57	97.12	72 0 53.31	8	−0.265
246	. .	18 2 27	96.63	9 32 56.83	8	+0.216
[12]247	326	7 45	96.82	79 59 14.18	16	.678
248	. .	9 39	96.64	38 44 40.43	4	.832
249	. .	12 26	96.63	42 7 26.54	8	1.088
250	. .	15 53	96.63	29 37 17.03	4	.390
251	. .	15 56	96.64	21 55 3.27	4	.393
252	. .	17 31	96.63	51 18 8.62	4	.531
253	. .	19 3	96.63	51 15 3.16	4	.665
254	. .	25 19	96.64	23 47 51.46	4	2.211
255	335	26 16	96.63	59 28 49.35	4	.294
256	. .	30 48	96.63	56 57 59.85	4	.687
257	. .	37 9	96.63	60 36 54.81	4	3.236
258	340	41 14	96.63	20 26 51.74	8	.588
259	342	44 50	96.63	49 19 2.47	7	.898
260	347	52 4	96.63	48 43 49.91	8	4.517
261	349	55 5	96.63	32 32 53.51	4	.773
262	. .	56 7	96.64	32 0 4.68	4	.861
263	351	19 0 40	96.64	13 42 36.96	4	5.246
264	. .	1 2	96.63	31 35 25.72	4	.277
[13]265	. .	9 25	96.63	49 39 40.82	4	.982
267	356	12 32	96.64	67 28 49.02	4	6.241
268	. .	12 47	96.63	37 57 0.72	4	.263
269	. .	12 56	96.86	76 23 20.11	8	.277
270	. .	20 40	96.63	43 11 13.92	4	.913
271	365	27 6	96.63	51 30 36.86	4	7.440
272	. .	35 18	96.63	29 54 56.70	4	8.100
273	. .	42 30	96.63	33 29 16.41	4	.672
[14]274	. .	43 50	96.64	11 33 33.98	4	.776
[15]275	378	48 31	96.86	70 0 19.63	11	9.144
276	377	49 4	96.63	47 39 56.65	4	.188
277	. .	56 6	96.63	45 29 27.46	4	.729
278	. .	20 0 35	96.64	19 41 44.48	4	10.071
279	. .	2 32	96.63	35 41 18.99	4	.217
280	386	9 53	96.64	61 45 59.82	8	.766
281	. .	10 3	96.63	46 30 13.78	4	.778
282	. .	14 41	96.63	34 39 38.57	4	11.118
283	. .	19 38	96.64	68 33 2.71	4	.476
284	395	25 24	96.64	36 6 38.89	8	.886
285	. .	27 4	96.64	36 35 19.41	4	12.002

D.	B.	R. A.	Epoch.	Decl. 1897.0	Obs.	Precess.
		h m s		° ′ ″		
286	. .	20 29 4	1896.63	12 40 27.51	4	+12.142
288	. .	34 8	96.63	0 7 27.25	4	.492
[16]289	. .	34 42	96.86	81 4 12.11	8	.532
290	. .	35 54	96.64	45 18 9.55	4	.613
291	404	37 55	96.63	44 54 43.99	4	.750
292	. .	38 6	96.64	60 7 57.84	4	.762
293	408	42 42	96.64	5 37 47.32	8	13.070
294	. .	43 23	96.64	36 6 43.54	4	.116
295	. .	49 42	96.63	44 47 29.05	4	.528
296	. .	55 58	96.63	39 51 2.81	4	.927
297	. .	55 58	96.84	75 31 37.36	8	.927
298	. .	21 0 0	96.63	41 13 14.44	4	14.179
[17]299	. .	5 53	96.63	22 2 6.16	4	.539
300	420	9 11	96.64	59 33 46.27	8	.736
301	421	10 40	96.63	4 49 18.79	4	.824
302	. .	16 49	96.84	76 34 42.43	8	15.182
303	428	21 33	96.64	36 13 20.27	8	.449
304	. .	28 54	96.86	75 57 3.02	8	.850
305	. .	29 26	96.63	45 23 48.79	4	.878
306	. .	33 21	96.63	5 18 24.69	4	16.086
307	438	39 7	96.63	9 24 9.51	4	.382
308	440	39 58	96.64	25 10 17.32	4	.425
309	. .	41 48	96.86	71 50 52.27	8	.516
310	. .	45 12	96.64	69 46 23.27	4	.683
311	. .	51 25	96.64	56 7 24.14	3	.978
312	. .	51 54	96.63	11 35 13.81	4	17.001
313	. .	56 4	96.64	59 48 13.93	4	.191
314	449	58 30	96.64	42 19 1.08	4	.300
315	. .	59 29	96.63	−1 24 16.85	4	.343
[18]316	. .	22 1 57	96.87	82 22 26.41	8	.450
317	453	2 12	96.67	24 50 31.15	8	.462
318	. .	2 59	96.64	21 12 4.81	4	.495
319	. .	8 17	96.70	69 37 25.19	4	.717
320	457	9 27	96.72	39 12 13.97	4	.765
321	. .	11 14	96.70	56 31 47.46	4	.837
322	. .	16 26	96.72	11 41 10.33	4	18.040
323	463	20 19	96.71	48 57 14.68	8	.186
324	464	25 19	96.72	32 2 43.36	4	.365
325	469	31 35	96.71	49 32 14.35	8	.579
326	. .	36 52	96.72	39 41 14.20	4	.748
327	. .	39 29	96.70	41 16 43.07	4	.828
328	475	45 43	96.70	41 24 28.50	4	19.008
329	. .	48 28	96.72	39 37 11.81	4	.083
330	480	57 9	96.70	56 33 7.30	4	.303
331	482	59 37	96.72	14 39 3.46	4	.361
332	. .	23 2 5	96.70	24 54 44.30	4	.416
333	. .	5 51	96.70	66 40 58.32	4	.496
334	. .	6 32	96.72	8 9 39.02	4	.509
335	485	8 18	96.70	56 35 58.77	4	.545
336	. .	14 10	96.97	73 7 32.99	8	.653
337	. .	26 12	96.72	38 40 13.22	4	.835
338	491	33 4	96.71	42 41 52.11	8	.914
339	. .	38 4	96.72	52 34 52.26	4	.961
340	. .	42 56	96.72	7 40 26.39	4	.997
341	. .	44 26	96.70	28 16 8.37	4	20.006
342	. .	49 13	96.70	56 55 34.60	4	.030
343	496	49 49	97.26	73 50 13.08	5	.033
344	. .	50 23	96.72	56 50 20.11	4	.035
345	497	52 30	96.70	24 34 8.07	4	.042
346	. .	57 25	96.98	82 23 58.93	10	.051
347	. .	59 47	96.72	−1 4 30.49	4	.053

[12] Prec. star. [13] Prec. star. [14] Close dup: mean. [15] Dup: mean. [16] Fol. star. [17] Fol. star. [18] Prec. star.

ADDITIONAL STANDARD CLOSE CIRCUMPOLAR STARS.

(1) **The List.** These stars were observed at the request of Doctor ARTHUR AUWERS, first printed in the Astronomische Nachrichten, No. 3440. Each star has been given eight observations at each culmination—four fixed circle East, and four circle West—making sixteen determinations in all, with the exception of a few observations lost by clouds. The observations were made during the period of nine months between September, 1897, and May, 1898, inclusive, and have been reduced to the mean equinox 1898.0. The constants of reduction have been derived from the ten close circumpolar stars, already forming a part of AUWERS' A. G. C. System.

In Right Ascension, the azimuth correction has been determined by the use of at least three of the Fundamental close circumpolar stars each night. Three observations of the Mire were made each night, and the results were used to strengthen the determinations of a from stars direct, and for the change or rate.

Three determinations of the level correction, over the Nadir, were made each night. One determination of the collimation correction, by opposing collimators, has been observed for each night, but the observation has generally been made during the day preceding or following.

The clock correction has been obtained from the same list of B. J. Equatorial stars that was employed in the series of observations made here by me in the years 1893 to 1896, being part of a list selected by Doctor AUWERS. In general, eight clock stars have been used each night.

The determinations of Declination depend upon the adopted Declinations of the ten Fundamental close circumpolar stars. Systematic corrections to the places of these stars have been derived from the comparison of the observed latitudes, at both culminations, and these corrections have been applied in obtaining the Declinations of this list. The Poulkova Refractions have been employed in the reductions.

Counting both components of one wide pair, there are 21 stars in the list to be determined, all above 82° Declination, while half of the list are above 85°. The magnitudes range from 5¼ to 7½, and the star places will be most useful for the determination of azimuth, when the ephemerides are computed and published. The mean places for each year, from 1895 to 1905, have already been published in the number of the Nachrichten referred to above; with the Precessions and the constants for reducing to apparent place, for ten-year intervals from 1890 to 1910.

There are 540 observations of the Circumpolar stars, in the present series, and

the Nadir readings bring the total up to 730 full observations, upon 64 nights. Besides these, 500 transits of Equatorial stars have been observed, for clock corrections used in the series.

The reductions were carried forward promptly, and were completed at the end of May, 1898. Mr. E. F. CODDINGTON, at that time holding a Fellowship at the Observatory, assisted in various details of the computations.

The results were published, first, in No. 3515 of the Astronomische Nachrichten, for September, 1898.

(2) **The Fundamental Stars.** The places of the ten close circumpolar stars, used as fundamental in this series, are given in Table I, following. The provisional corrections, given by Doctor AUWERS in Astronomische Nachrichten No. 3440, page 115, have been applied to the B. J. places for 1898. The table includes, also, the observed corrections to the adopted places, derived from the present series. Some explanation of these corrections may be required.

Since the clock correction has been obtained by the transits of Equatorial stars, the observed Right Ascensions of the azimuth stars do not necessarily reproduce the assumed places. The difference may be due to errors of observation, or to errors, systematic or accidental, in the catalogue Right Ascensions. The azimuth correction, moreover, depends upon three or four stars, and its application to the observations may not satisfy the correction required for the individual stars, in all cases.

The observed corrections show evidence of systematic difference. This may be due to a difference in the systems of Right Ascensions of Clock stars and of Circumpolar stars, or to systematic error of observation.

The differences are nearly the same for both culminations (Table II), hence they do not appear to be due to errors in the determination of instrumental corrections, nor to personal equation depending upon the apparent direction of transit. Such errors may exist, but, if so, they evidently balance in their effect. The observed differences may be due to a tendency to record slow moving stars too early, in both directions of transit. Such a form of personal equation, if constant, would not affect the determination of azimuth, from pairs of the same declination.

In the observations of the Circumpolar stars, for azimuth, published in Volume IV, there was found to be an observed correction to the B. J. Right Ascensions of 45 stars, amounting to $-0^s.008$ sec δ, in the mean. For the present series, with AUWERS' provisional corrections to the B. J. Right Ascensions, the similar difference is $-0^s.003$ sec δ. The correction to transits, due to the direction of the apparent motion, has been determined at the zenith. This correction, of which details will be given later, is $-0^s.03$ at the zenith, opposite in sign to the above observed correction to the Right Ascensions of the Circumpolar stars.

In Declination, similarly, the accidental errors of observation will produce

deviations in the observed places, from those assumed, for the Fundamental stars. Errors in the assumed places may account for part of these deviations. There is evidence in the table, following, of a systematic difference between the assumed Declinations, and those derived in this series. This may be due, in part, to the use of the Poulkova Refractions in the reductions. If the Refractions adopted are too large, the negative corrections to the assumed Declinations, at lower culmination, would exceed the positive corrections to the assumed Declinations at upper culmination, and there would result an observed negative correction, for the mean of both culminations.

There are included sixteen observations of the Fundamental stars, four at each culmination, in both positions of the instrument; and, for three of the stars, double the above number. The observed Latitudes, and those corrected for the Variation, are entered for each star. The results, for the mean of both culminations, are free from the effect of error in the adopted Declinations. The probable error includes the effect of errors of observation, and of graduation, only.

TABLE I.

PLACES OF THE FUNDAMENTAL CLOSE CIRCUMPOLAR STARS.

No.	Star.	R. A. 1898.0	Decl. 1898.0	Obs. Corr.	Obs.	φ	φ_o
		h m s	° ′ ″	s ″		″	″
1	43 H. Cephei . .	0 54 46.75	85 42 35.54	−0.02 −0.13	16	25.44	25.46
2	α Urs. Min. . . .	1 21 43.21	88 45 49.03	− .03 − .09	16	25.21	25.19
3	Groom. 750 . . .	4 4 30.99	85 17 9.18	− .04 + .02	32	25.38	25.34
4	51 H. Cephei . .	6 52 44.62	87 12 29.82	− .08 − .18	32	25.26	25.26
5	1 H. Draco. . . .	9 22 33.35	81 46 37.91	− .12 − .10	16	25.34	25.40
6	30 H. Cam. . . .	10 18 39.37	83 4 39.29	− .04 − .14	16	25.51	25.52
7	ϵ Urs. Min. . . .	16 56 24.82	82 12 18.73	+ .04 − .09	16	25.30	25.28
8	δ Urs. Min. . . .	18 5 11.72	86 36 46.81	+ .05 − .19	16	25.39	25.32
9	λ Urs. Min. . . .	19 24 45.13	88 59 1.63	− .10 − .10	31	25.55	25.55
10	76 Draco.	20 49 58.67	82 9 12.84	− .03 − .01	16	25.71	25.73
			Mean			25.41	25.41
			Probable error one star			±0.10	±0.11
			Mean by weights . .			25.40	25.40

In Table II, which follows, the observed differences are given with more detail. The stars can be identified by their numbers in the preceding table. The corrections, in the sense observed minus catalogue, are given for the two culminations separately, with the mean values. The comparison of the observed Latitudes, at the two culminations, furnish a correction to the assumed Declination of each star, which is independent of the adopted places of the other Fundamental stars. The values of $(\varphi - \varphi_o)$ have been computed, by *Chandler's* elements, for the derivation of the Normal Latitude φ_o, for each culmination. As before noted, the final mean correction to the assumed Declinations may be due either to errors in these

Declinations, or to the use of Refraction corrections too large for the conditions at this Observatory. Bisection error would most probably be constant for both culminations, and Flexure would only enter differentially in the observations of Latitude, so that the effect of both may be disregarded in the Latitude comparison.

TABLE II.

OBSERVED CORRECTIONS TO THE FUNDAMENTAL PLACES.

Star.	Right Ascension.			Declination.			Normal Latitude, φ_0				Decl.
	U. C.	L. C.	Mean.	U. C.	L. C.	Mean.	U. C.	L. C.	Δ	Mean.	Corr.
	s	s	s	"	"	"	"	"	"	"	"
1	−0.002 sec δ	−0.002 sec δ	−0.002 sec δ	−0.03	−0.23	−0.13	25.61	25.32	+0.29	25.46	−0.14
2	− .005 "	+ .003 "	− .001 "	− .06	− .12	− .09	25.26	25.13	+ .13	25.19	− .07
3	− .001 "	− .007 "	− .004 "	.00	+ .05	+ .02	25.37	25.31	+ .06	25.34	− .03
4	+ .004 "	− .012 "	− .004 "	− .04	− .32	− .18	25.46	25.06	+ .40	25.26	− .20
5	− .014 "	− .020 "	− .017 "	− .09	− .12	− .10	25.42	25.38	+ .04	25.40	− .02
6	.000	− .011 "	− .005 "	− .10	− .18	− .14	25.64	25.41	+ .23	25.52	− .12
7	+ .012 "	.000	+ .006 "	− .14	− .04	− .09	25.39	25.17	+ .22	25.28	− .11
8	.000	+ .006 "	+ .003 "	− .13	− .25	− .19	25.39	25.25	+ .14	25.32	− .07
9	− .005 "	+ .001 "	− .002 "	− .26	+ .06	− .10	25.63	25.47	+ .16	25.55	− .08
10	− .012 "	+ .004 "	− .004 "	− .16	+ .13	− .01	25.73	25.73	.00	25.73	.00
Means	−0.002 sec δ	−0.004 sec δ	−0.003 sec δ	−0.10	−0.10	−0.10	25.49	25.32	+0.17	25.41	−0.08

(3) **Systematic Errors.** If the mean difference, 0".17, between the Latitude φ_0 at the two culminations is to be attributed to the effect of the Refractions used in these reductions, the μ of the Poulkova tables would need to be diminished 0".0064 for these zenith distances. But the difference of zenith distance, for the two culminations, is entirely too small to permit of any reliable determination of the Refraction errors.

Recent observing, however, confirms the need of diminished Refractions, if the Declinations of other systems than that of the A. G. C. are to be reconciled with the observations of the Circumpolar stars.

The Declination systems recently derived for the Southern stars, when treated apart, indicate the same need of revision for the Poulkova Refractions, at this Observatory. In a subsequent part of this volume, the Piazzi series, the subject will be treated with more detail.

The Bisection error has been determined, as in previous years, by the observation of stars at the zenith, facing North and South, alternately. When transits are also observed, the correction depending upon the direction of the star's apparent motion can also be derived. There are collected, below, all of the sets of determinations of these corrections, that have been made up to the close of this series. A single determination consists of four observations, one pair of stars, upon two nights; and, in the reduction, every other source of difference has been eliminated,

except accidental error of observation. The resulting $\Delta\alpha$ (S — N) indicates the correction to be applied to transits, or to observed Right Ascensions, when facing North at the zenith. The correction appears to be consistent throughout the four years of observation. The effect of this correction does not appear to be sensible, in the observations of the Circumpolar stars at both culminations, as already noted. For all the observations of the Circumpolar stars, in the series to be determined, the systematic correction derived in Table II, $+0^s.003$ sec δ, has been applied. The correction is entered in the table giving the observed Right Ascensions, and may be included, or not, as desired in subsequent use of these places.

The ΔZ, tabulated below, is the correction to be applied to all observed zenith distances. Of eight sets included, three have been published in Volume IV, and three are to be found in the series of observations of Latitude stars, preceding this. The correction, if constant at all altitudes, will not affect determinations of Declination based upon Fundamental stars on the same side of the zenith. But the correction would be applicable to determinations of the Latitude; plus for φ observed with North stars, and minus for φ observed with South stars. The $\Delta\varphi$, from the observations at both culminations, would not be affected by this correction.

TABLE III.

Epoch.	No.	$\Delta\alpha$	No.	$\frac{1}{2}\Delta Z$
		s		"
1894.1	.8	−0.035	8	−0.13
1894.6			5	+ .03
1895.6	10	− .020	10	− .13
1896.4	8	− .026	8	− .03
1896.5	8	− .035	8	+ .02
1897.4			7	− .10
1898.3	5	− .033	5	− .07
1898.3			5	− .02
Means . .		−0.030		−0.06
		−0.025 sec δ		

The Flexure has been determined, as in previous years, by observing upon the two collimators, about equally in both positions of the instrument, circle East and West. The correction has always been small, and for the present set of Declinations, it would be entirely insensible, from the differential character of the work. The following values have been obtained, the correction, f = semi-horizontal flexure, being tabulated here, with the sign applicable to observed zenith distances.

TABLE IV.

1893 to 1896	25 determinations	f = −0".09
1896 " 1897	11 "	+ .05
1897 " 1898	8 "	+ .08
Probable error of one determination		± .1

Since the differences due to Flexure and Bisection error are practically insensible in the observations of the two culminations, the systematic difference

observed may most probably be attributed to the Refraction. Graduation error may possibly form a part of the correction derived for each star; and, since the refraction effect also varies with the difference of zenith distance of the two culminations, it has been deemed best to use the individual values of Table II, and to apply the correction to the Declination of each Fundamental star, in the reductions. The mean effect, for the Fundamentals used each night, is very small. But it has been entered in the table of Declinations of the list determined, and applied to the final Declination.

(4) **The Latitude.** The mean values of the Latitude, from this series, have already been given in Table II, in which the observations of the separate stars have been assigned the same weight. In Table V, following, the series of values is given in the order of determination. Each result in the table corresponds to the mean of two nights, one circle East and one West, for the elimination of the graduation error of the Nadir reading. Each group of four nights includes the observations of the same set of stars, and groups upon the same horizontal line correspond to the same sets, at opposite culminations.

The probable error of a pair of nights is sensibly diminished by the application of the correction for the Latitude Variation, $\varphi - \varphi_0$. Treated as a consecutive series, the probable error of φ_0 for one pair of nights is $\pm 0''.12$, including the error of Declination. By taking out the group residuals, the probable error of a pair is $\pm 0''.09$. The declination error being thus eliminated, the probable error of observation would be $\pm 0''.13$ for one night. The probable error of a Nadir reading has been derived from 159 determinations, upon 53 nights, when no rate was adopted. For one observation the probable error is $\pm 0''.14$, and for the mean of three $\pm 0''.08$.

TABLE V.

THE LATITUDE BY NIGHTS: PAIRS.

1897.		φ	φ_0	1898.		φ	φ_0
		″	″			″	″
Sept.	5	25.28	25.53	Feb.	3	25.36	25.24
"	7	25.29	25.55	"	5	25.61	25.48
"	11	25.05	25.31	"	6	25.49	25.35
"	13	25.34	25.61	"	11	25.38	25.23
Sept.	28	25.33	25.61	Mar.	11	25.69	25.45
"	30	25.06	25.34	"	13	25.81	25.57
Oct.	5	25.41	25.69	"	17	25.81	25.56
"	9	25.37	25.65	"	21	25.89	25.63
Nov.	3	24.82	25.06	April	26	25.52	25.25
"	7	25.24	25.47	"	28	25.45	25.18
"	9	24.89	25.11	"	30	25.54	25.27
"	12	24.97	25.18	May	4	25.59	25.33
Dec.	12	25.26	25.37	May	16	25.47	25.23
"	20	25.51	25.58	"	18	25.51	25.28
"	23	25.62	25.68	"	24	25.33	25.11
"	25	25.34	25.39	"	26	25.57	25.36
Mean						25.40	25.40
Probable error, one pair						±0.17	±0.12
By groups, probable error, one pair							±0.09
Normal Latitude, $\varphi_0 = 37^\circ\ 20'$							25.40
							(±0.02)

The results of previous determinations of the Latitude, by Meridian Circle observations of Circumpolar stars at both culminations, are given here for comparison with this series. In the first series, flexure, to the amount of 0".1 sin Z, had been applied.

		Flexure Applied.	Without Flexure.
1893 to 1896	32 B. J. stars	$\varphi_0 = 25''.52$	$\varphi_0 = 25''.44$
1896 to 1897	11 stars, Boss.		25 .37
1897 to 1897	10 stars, Auwers.		25 .40

The application of the Bisection correction would increase the above results 0".06. And the effect of diminished Refraction corrections would be to increase the Latitude thus derived from North stars.

(5) **The Clock Stars.** In Table VI, following, are collected the observed Right Ascensions of 51 Equatorial stars, used to determine the clock corrections in this series. The places are from the Berliner Jahrbuch, except for that of 25 Monoc. $7^h\ 32^m$, for which the correction, $+0^s.10$, has been applied. This correction was derived from the earlier observations of the Fundamental stars, in Volume IV, of the Publications of this Observatory. The error in the B. J. place has been explained, in a letter from Doctor AUWERS, as due to the accumulation of erroneous proper motion, derived from Greenwich 1866 and Bradley. The correction is confirmed by the observations of the present series.

The Observations have been reduced, for each star, in such a manner as to make the observed corrections to B. J. independent of the use of the catalogue Right Ascension of the star. The observed correction thus depends upon the places of seven other clock stars, observed the same night, or series of nights. The observed places have been corrected for the B. J. proper motions.

The probable error of one observation of a clock star is $\pm 0^s.020$, obtained by a comparison of the determinations made in the two positions of the instrument. Comparing the results of this series, with those of Volume IV, for 47 stars common to both, the resulting probable error of a Right Ascension, derived from eight observations in general, is $\pm 0^s.008$. There are 502 observations included here.

TABLE VI.

OBSERVED RIGHT ASCENSIONS OF CLOCK STARS. 1898.0.

Star.	Obs. R. A.	No.	Obs. – B. J.	Star.	Obs. R. A.	No.	Obs. – B. J.
	h m s		s		h m s		s
γ Pegasi	0 7 58.924	8	−0.023	β Virginis	11 45 22.930	8	+0.047
12 Ceti	0 24 49.997	8	+ .008	o Virginis	12 0 8.827	8	+ .018
ε Piscium	0 57 38.890	8	− .006	ε Virginis	12 57 5.923	8	− .040
o Ceti	2 14 11.571	8	+ .036	ζ Virginis	13 29 29.701	8	+ .026
ξ 2 Ceti	2 22 44.045	7	− .024	ι Virginis	14 10 39.880	7	+ .045
δ Ceti	2 34 15.213	8	− .011	μ Virginis	14 37 41.014	8	+ .011
α Ceti	2 56 56.796	8	+ .053	109 Virginis	14 41 5.467	8	+ .021
o Tauri	3 19 19.373	15	− .021	P. 221	14 51 24.276	8	− .100
ε Eridani	3 28 7.491	8	+ .061	α Serpentis	15 39 14.547	7	− .028
ν Tauri	3 57 43.763	8	− .022	ε Serpentis	15 45 43.812	16	+ .003
ν Eridani	4 31 13.318	16	+ .068	ζ Ophiuchi	16 31 32.474	16	+ .016
π 5 Orionis	4 48 56.222	16	− .052	α Herculis	17 9 59.729	8	− .023
γ Orionis	5 19 39.584	7	+ .039	β Ophiuchi	17 38 25.974	8	+ .001
8 Monoc.	6 18 21.757	13	− .061	η Serpentis	18 16 1.908	8	+ .066
S Monoc.	6 35 21.623	15	− .034	λ Aquilae	19 0 50.161	7	+ .054
18 Monoc.	6 42 32.539	15	− .003	ω Aquilae	19 13 1.695	8	− .014
λ Gemin.	7 12 13.844	8	− .045	γ Aquilae	19 41 24.573	8	− .025
25 Monoc.	7 32 12.394	8	+ .109*	ϑ Aquilae	20 6 2.516	8	+ .042
Br. 1197	8 20 33.835	7	+ .031	ε Delphini	20 28 20.359	8	− .021
ϑ Hydrae	9 9 3.451	14	− .018	ε Aquarii	20 42 9.293	8	+ .034
6 Sextantis	9 46 5.637	7	− .039	β Aquarii	21 26 11.346	7	− .011
π Leonis	9 54 49.433	16	+ .027	ε Pegasi	21 39 10.531	16	− .038
α Leonis	10 2 56.426	16	+ .025	ϑ Aquarii	22 11 27.092	16	− .003
1 Leonis	10 43 53.746	7	− .035	η Aquarii	22 30 6.888	16	+ .009
σ Leonis	11 15 52.615	7	− .017	λ Aquarii	22 47 17.619	8	+ .055
				ι Piscium	23 34 42.205	8	+ .014

* Ephemeris place corrected +0s.10

(6) **The Observed Places.** The Right Ascensions and Declinations in the following list are based upon sixteen observations for each star, four at each culmination, in both positions of the circle. The names, magnitudes, and proper motions are taken from the list, published in A. N. 3440, by Doctor AUWERS, and the Precessions have been interpolated from the ten-year values of the same issue. In the following tables of positions, the observations at upper culmination and lower culmination are given separately, and the systematic correction, to be applied to the mean of both culminations, is tabulated apart. The final Right Ascensions and Declinations include these systematic corrections. The data, upon which they are based, have already been described. They are of small size, in all cases.

No corrections for proper motion have been applied, in the reduction of these observations.

The probable errors of a single observation have been determined from the

comparison of four observations, in the same position, at each culmination. These are:

P. E. 1 observation R. A. $\pm 0^s.015$ sec δ
P. E. 1 observation Decl. $\pm 0''.20$ U. C. $\pm 0''.22$ L. C.

By comparing the mean of four observations in one position, with the mean of four in the other position, the following are obtained:

P. E. mean of 4 observations R. A. $\pm 0^s.008$ sec δ
P. E. mean of 4 observations Decl. $\pm 0''.15$

The effect of graduation error is included here, and is thus found to be $\pm 0''.11$, for one circle reading upon two divisions under each microscope. This is in agreement with the actual measurement of the errors of graduation, which gave $\pm 0''.15$ for the probable error of the mean of four divisions, one under each microscope. The results of the measurement of graduation errors are given in Volume IV, page 46.

By comparing the results at the two culminations there are derived the following for a single culmination:

P. E. mean of 8 observations R. A. $\pm 0^s.008$ sec δ
P. E. mean of 8 observations Decl. $\pm 0''.11$

The constant difference, U. C.—L. C.=—$0''.14$, has been adopted here, in deriving the residuals.

There result, finally, for the probable errors of these observed places:

Mean of 16 observations R. A. $\pm 0^s.005$ sec δ
Mean of 16 observations Decl. $\pm 0''.08$

The probable error of Declination may be quite exactly distributed between probable error of observation, $\pm 0''.06$, and probable error of graduation, $\pm 0''.06$, there being four separate circle readings upon each star. Every observation has been included, in both Right Ascension and Declination, and no residuals have been rejected in this discussion.

As indicating how large a part the unavoidable errors in the reduction may play, the simultaneous observations of the transits of the two stars of the pair, l_1 and l_2 of the list, give an interesting illustration. Each star was observed completely, upon sixteen nights, and both transits were recorded. This gives thirty-two values of the mean difference at transit, $7^s.56$, with the probable error of one determination $\pm 0^s.087$. The probable error of a transit is thus found to be $\pm 0^s.061$, which reduces to $\pm 0^s.001$ sec δ, for the mean of thirty-two observations.

TABLE VII.

OBSERVED RIGHT ASCENSIONS. 1898.0.

No.	A.	Star.	Mag.	Obs.	U. C.	L. C.	Epoch.	Mean.	Sys. Corr.	R. A.	Prec.	Pr. Mo.
				h m	s	s		s	s	s	s	s
1	a	Ceph. Br. 256 . .	6.9	2 1	7.62	7.59	1898.09	7.60	+0.02	7.62	+ 8.628	+0.025
2	b	Ceph. 147 Hs. . .	5.9	3 8	7.90	8.01	98.09	7.96	+ .03	7.99	+13.325	+ .048
3	c	Ceph. 149 Hs. . .	5.9	3 33	14.91	14.92	98.09	14.92	+ .05	14.97	+19.767	+ .160
4	d	Ceph. 157 Hs. . .	6.3	4 55	36.13	36.16	98.18	36.14	+ .04	36.18	+20.674	+ .023
5	e	Ceph. 158 Hs. . .	6.3	5 29	16.78	16.86	98.18	16.82	+ .03	16.85	+18.673	+ .014
6	f	Ceph. 109 Hs. . .	6.2	7 52	31.26	31.69	98.18	31.47	+ .03	31.50	+14.994	- .006
7	g	Urs. Min. 4 B. . .	7.2	7 55	50.97	49.87	97.90	50.42	+ .16	50.58	+66.203	- .068
8	h	Ceph. 121 Hs. . .	6.3	8 54	5.61	5.28	97.90	5.44	+ .03	5.47	+13.309	+ .021
9	i	Cam. s. 664 . . .	7.4	11 2	13.66	13.62	97.98	13.64	+ .05	13.69	+ 8.084	- .033
10	k	Urs. Min. 3 Hs. .	6.2	12 14	22.71	22.28	97.98	22.49	+ .10	22.59	+ 0.305	- .069
11	l_1	32 H. Cam. . . .	6.3	12 48	14.69	14.53	97.98	14.61	+ .03	14.64	+ 0.427	- .011
12	l_2	32 H. Cam. . . .	5.5	12 48	22.34	22.12	98.09	22.23	+ .03	22.26	+ 0.422	- .014
13	m	Ceph. 135 Hs. . .	6.1	13 45	14.17	14.03	98.09	14.10	+ .03	14.13	- 1.944	+ .021
14	n	Urs. Min. 57 B . .	7.1	15 10	1.83	1.93	98.18	1.88	+ .07	1.95	-20.696	- .007
15	o	Urs. Min. 33 Hs. .	7.5	15 53	60.08	59.90	98.09	59.99	+ .03	60.02	- 6.565	+ .013
16	p	Ceph. 3 Hs. . . .	7.0	20 14	16.04	16.18	97.90	16.11	+ .03	16.14	- 8.230	- .011
17	q	Ceph. Gr. 3548 . .	7.3	21 19	57.48	57.70	97.98	57.59	+ .05	57.64	-11.458	+ .020
18	r	32 H. Ceph. . . .	5.3	22 21	26.20	26.29	97.90	26.24	+ .04	26.28	- 4.162	+ .051
19	s	36 H. Ceph. . . .	5.7	22 55	13.31	13.31	97.98	13.31	+ .03	13.34	- 0.360	+ .064
20	t	39 H. Ceph. . . .	5.9	23 27	49.06	49.04	97.98	49.05	+ .05	49.10	- 0.217	+ .093
21	u	Ceph. 125 Hs. . .	6.3	23 51	39.96	40.09	97.98	40.02	+ .02	40.04	+ 2.697	+ .029

TABLE VIII.

OBSERVED DECLINATIONS. 1898.0.

No.	A.	Obs.	U. C.	L. C.	Δ	Epoch.	Mean.	Sys. Corr.	Decl.	Prec.	Pr. Mo.
		° ′	″	″	″		″	″	° ′ ″	″	″
1	a	83 4	55.39	55.25	+0.14	1898.09	55.32	0.00	83 4 55.32	+17.316	-0.056
2	b	84 32	59.33	59.51	- .18	98.09	59.42	.00	84 32 59.42	+13.667	- .125
3	c	86 19	33.18	33.17	+ .01	98.09	33.18	.00	86 19 33.18	+11.980	- .066
4	d	85 49	35.12	35.04	+ .08	98.18	35.08	- .02	85 49 35.06	+ 5.560	- .078
5	e	85 8	44.31	44.21	+ .10	98.18	44.26	- .02	85 8 44.24	+ 2.679	+ .009
6	f	84 21	8.65	8.85	- .20	98.18	8.75	- .02	84 21 8.73	- 9.455	- .004
7	g	88 56	18.11	18.97	- .86	97.90	18.54	- .05	88 56 18.49	- 9.710	+ .020
8	h	84 35	26.06	26.18	- .12	97.90	26.12	- .05	84 35 26.07	-13.809	+ .033
9	i	86 11	36.69	36.80	- .11	97.98	36.74	+ .01	86 11 36.75	-19.418	.000
10	k	88 15	55.15	55.06	+ .09	97.98	55.11	+ .01	88 15 55.12	-20.013	+ .066
11	l_1	83 58	20.52	20.93	- .41	97.98	20.73	+ .01	83 58 20.74	-19.609	+ .016
12	l_2	83 58	2.38	2.66	- .28	98.09	2.52	.00	83 58 2.52	-19.607	+ .019
13	m	83 15	51.43	51.47	- .04	98.09	51.45	.00	83 15 51.45	-17.976	- .042
14	n	87 37	31.01	30.98	+ .03	98.18	31.00	+ .02	87 37 31.02	-13.545	+ .029
15	o	83 15	18.66	18.91	- .25	98.09	18.78	.00	83 15 18.78	-10.477	- .001
16	p	84 22	15.76	16.00	- .24	97.90	15.88	+ .05	84 22 15.93	+11.087	- .038
17	q	86 36	53.64	53.67	- .03	97.98	53.66	- .01	86 36 53.65	+15.359	+ .022
18	r	85 35	40.38	40.56	- .18	97.90	40.47	+ .05	85 35 40.52	+18.226	+ .048
19	s	83 48	0.97	1.32	- .35	97.98	1.14	- .01	83 48 1.13	+19.256	+ .018
20	t	86 44	41.23	41.16	+ .07	97.98	41.20	- .01	86 44 41.19	+19.855	+ .017
21	u	82 37	23.13	23.42	- .29	97.98	23.28	- .01	82 37 23.27	+20.039	+ .015

(7) **Comparison with Catalogue.** Approximate places of these stars, derived by Doctor STUMPE, were published in the Astronomische Nachrichten, No. 3440. The observations of this series give the following corrections to his places, the small amount of proper motion being included in each comparison:

TABLE IX.

	R. A.	Decl.		R. A.	Decl.
	s	"		s	"
a	+0.23	+0.46	l_1	−0.31	+0.35
b	+ .03	− .60	l_2	− .21	− .01
c	− .22	− .04	m	− .02	− .02
d	− .16	.00	n	+ .16	+ .01
e	− .37	− .54	o	− .23	+ .29
			p	+ .27	− .46
f	− .21	− .93			
g	− .35	− .52	q	− .01	− .55
h	− .40	− .64	r	.00	− .49
i	− .22	+ .19	s	+ .04	+ .13
k	− .02	− .07	t	+ .27	− .17
			u	− .05	− .72
Means				−0s.005 sec δ	−0".21
Average				±0 .013 "	±0 .34
Mean v				±0 .013 "	±0 .34
Probable error observed place				±0 .005 "	±0 .08
Probable error predicted place				±0 .010 "	±0 .25

(8) **Observations by Nights.** The separate nights of observation are given in the following pages. The Fundamental and Clock stars are represented by the constellation names; the stars to be determined by the letters of the alphabet, as in the foregoing list. The column of Corrections includes the collimation, level, and azimuth, for which the constants are given at the end of each night. The Transit has been reduced to the center thread.

The Circle has been corrected for the reading of the Decl. Micrometer. The Refraction is from the Poulkova Tables, the mean meteorological record being given below. The Equator Point has been determined from the Circumpolar Fundamental stars. The separate values of the observed φ afford the means of reducing the observations in the fundamental manner, by adopting a value of the Latitude.

The weights are on a scale of 1 for the worst nights, and 5 for the best. No use of the weights has been made in combining the observations. In general, no night of less than weight 2 has been used. The difficulty of obtaining satisfactory bisections increases for the bad nights, but the result may generally be acceptable.

AUGUST 31, 1897. CIR. E, WT. 2, OBSR. T.

Star.	Transit.	Corr.	ΔT	App. R. A.	Circle.	Refr.	Eq.	App. Decl.	φ
	h m s	s	s	h m s	° ′ ″	″	″	° ′ ″	″
51 H. Ceph. l. c. .	18 53 6.33	+ 4.98	−41.81	6 52 29.50	370 22 31.62	+ 71.53	4.22	87 12 21.07	25.85
λ Urs. Min. . .	19 26 25.76	− 14.57	.82	19 25 29.37	366 34 10.98	+ 62.41	4.22	88 59 9.17	26.00
γ Aquilae . . .	42 7.573	− 0.332	.824	19 41 25.417	. . . .	. . .	. .	. . . .	. .
g l. c. . . .	55 31.95	+ 13.12	.83	7 55 3.24	368 38 44.11	+ 67.37	4.22	88 56 12.74	. .
9 Aquilae . . .	20 6 45.559	− 0.285	.828	20 6 3.446	. . . .	. . .	. .	. . . .	. .
p	15 9.62	− 2.78	.83	20 14 25.01	361 57 33.61	+ 53.17	4.22	84 22 22.56	. .
ε Delphini . .	29 3.459	− 0.339	.832	20 28 21.288	. . . .	. . .	. .	. . . .	. .
ε Aquarii . . .	42 52.437	− 0.253	.834	20 42 10.350	. . . .	. . .	. .	. . . .	. .
h l. c. . . .	54 34.65	+ 2.25	.84	8 53 55.06	372 59 21.65	+ 79.22	4.22	84 35 23.35	. .
1 H. Dr. l. c. . .	21 23 6.99	+ 1.35	.84	9 22 26.50	375 47 59.38	+ 88.48	4.22	81 46 36.36	23.89
ε Pegasi . . .	39 53.787	− 0.338	.843	21 39 11.606	. . . .	. . .	. .	. . . .	. .
9 Aquarii . . .	22 12 10.416	− 0.270	.849	22 11 28.297	. . . .	. . .	. .	. . . .	. .
r	22 23.91	− 3.27	.85	22 21 38.79	363 10 47.66	+ 55.28	4.22	85 35 38.72	. .
η Aquarii . . .	30 50.209	− 0.302	.852	22 30 8.055	. . . .	. . .	. .	. . . .	. .

c +s.010 c' −s.007 ΔT −41s.837 Nadir 134° 56′ 29″.55 t 53.7

b − .370 at 21h 3m Equator 277 36 4 .22 B 25.75

a + .021 at 19h.8 Rate −s.01 Rate −s.010 T 57

SEPTEMBER 1, 1897. CIR. E, WT. 3, OBSR. T.

Star.	Transit.	Corr.	ΔT	App. R. A.	Circle.	Refr.	Eq.	App. Decl.	φ
	h m s	s	s	h m s	° ′ ″	″	″	° ′ ″	″
51 H. Ceph. l. c. .	18 53 6.00	+ 5.50	−42.07	6 52 29.43	370 22 32.59	+ 71.51	4.00	87 12 19.90	25.10
λ Urs. Min. . .	19 26 25.59	− 15.86	.09	19 25 27.64	366 34 11.41	+ 62.26	4.00	88 59 9.67	25.97
γ Aquilae . . .	42 7.823	− 0.351	.098	19 41 25.374	. . . .	. . .	. .	. . . .	. .
g l. c. . . .	55 32.48	+ 14.06	.10	7 55 4.44	368 38 44.31	+ 67.08	4.00	88 56 12.61	. .
9 Aquilae . . .	20 6 45.766	− 0.299	.110	20 6 3.357	. . . .	. . .	. .	. . . .	. .
p	15 10.31	− 2.97	.11	20 14 25.23	361 57 32.59	+ 52.88	4.00	84 22 21.47	. .
ε Delphini . .	29 3.816	− 0.353	.121	20 28 21.342	. . . .	. . .	. .	. . . .	. .
ε Aquarii . . .	42 52.723	− 0.258	.128	20 42 10.337	. . . .	. . .	. .	. . . .	. .
h l. c. . . .	54 34.69	+ 2.43	.13	8 53 54.99	372 59 21.90	+ 78.81	4.00	84.35 23.29	. .
1 H. Dr. l c. . .	21 23 6.82	+ 1.38	.15	9 22 26.05	375 47 58.24	+ 87.97	4.00	81.46 37.79	25.88
ε Pegasi . . .	39 54.159	− 0.347	.157	21 39 11.655	. . . .	. . .	. .	. . . .	. .
9 Aquarii . . .	22 12 10.759	− 0.266	.173	22 11 28.320	. . . .	. . .	. .	. . . .	. .
r	22 24.75	− 3.27	.18	22 21 39.30	363 10 47.45	+ 55.04	4.00	85 35 38.49	. .
η Aquarii . . .	30 50.530	− 0.301	.182	22 30 8.047	. . . .	. . .	. .	. . . .	. .

c +s.006 c' −s.011 ΔT −42s.137 Nadir 134° 56′ 29″.53 t 54.1

b − .390 at 21h 3m Equator 277 36 4 .00 B 25.66

a + .028 at 19h.8 Rate −s.02 Rate −s.030 T 55

SEPTEMBER 8, 1897. CIR. E, WT. 3, OBSR. T.

Star.	Transit.	Corr.	ΔT	App. R. A.	Circle.	Refr.	Eq.	App. Decl.	φ
	h m s	s	s	h m s	° ′ ″	″	″	° ′ ″	″
51 H. Ceph. l. c. .	18 53 13.53	+ 5.43	− 45.03	6 52 33.93	370 22 32.09	+ 72.24	3.36	87 12 19.03	25.21
λ Urs. Min. . .	19 26 21.13	− 16.12	.04	19 25 19.97	366 34 11.87	+ 62.96	3.42	88 59 11.41	25.63
γ Aquilae . . .	42 10.637	− 0.289	.040	19 41 25.308	. . . .	. . .	. .	. . . .	. .
g l. c. . . .	55 41.72	+ 15.11	.04	7 55 11.79	368 38 44.84	+ 67.89	3.52	88 56 10.79	. .
ϑ Aquilae . . .	20 6 48.630	− 0.233	.045	20 6 3.352	. . . .	. . .	. .	. . . .	. .
p	15 11.56	− 3.15	.05	20 14 23.36	361 57 34.01	+ 53.53	3.58	84 22 23.96	. .
ε Delphini . .	29 6.644	− 0.292	.050	20 28 21.302	. . . .	. . .	. .	. . . .	. .
ε Aquarii . . .	42 55.516	− 0.190	.052	20 42 10.274	. . . .	. . .	. .	. . . .	. .
h l. c. . . .	54 38.92	+ 2.86	.05	8 53 56.73	372 59 22.50	+ 79.87	3.72	84 35 21.35	. .
1 H. Dr. l. c. . .	21 23 10.41	+ 1.84	.06	9 22 27.19	375 47 59.90	+ 89.32	3.82	81 46 34.60	24.96
ε Pegasi . . .	39 56.980	− 0.284	.064	21 39 11.632	. . . .	. . .	. .	. . . .	. .
ϑ Aquarii . . .	22 12 13.566	− 0.198	.070	22 11 28.298	. . . .	. . .	. .	. . . .	. .
r	22 27.12	− 4.17	.07	22 21 37.88	363 10 49.44	+ 55.89	4.02	85 35 41.31	. .
η Aquarii . . .	30 53.373	− 0.235	.074	22 30 8.064	. . . .	. . .	. .	. . . .	. .

c +s.010 c' −s.007 ΔT −45s.057 Nadir 134° 36′ 29″.08 at 21h.0 t 49.0

b − .352 at 21h 3m Equator 277 36 3 .54 at 20 .0 B 25.73

a + .080 at 19h.8 Rate +s.01 Rate −s.012 Rates +0″.20 T 51

SEPTEMBER 9, 1897. CIR. E, WT. 4, OBSR. T.

Star.	Transit.	Corr.	ΔT	App. R. A.	Circle.	Refr.	Eq.	App. Decl.	φ
	h m s	s	s	h m s	° ′ ″	″	″	° ′ ″	″
51 H. Ceph. l. c. .	18 52 29.63	+ 6.27	− 1.32	6 52 34.58	370 22 33.46	+ 71.75	3.86	87 12 18.65	25.09
λ Urs. Min. . .	19 25 37.90	− 18.08	.29	19 25 18.53	366 34 12.46	+ 62.53	3.86	88 59 11.13	26.18
γ Aquilae . . .	41 26.809	− 0.269	.268	19 41 25.272	287 58 27.23	− 25.24	3.86	10 21 58.13	25.22
g l. c. . . .	54 58.15	+ 16.82	.25	7 55 13.72	368 38 46.15	+ 67.42	3.86	88 56 10.29	. .
ϑ Aquilae . . .	20 6 4.794	− 0.207	.239	20 6 3.348	276 29 19.23	− 39.37	3.86	− 1 7 24.00	25.35
p	14 27.66	− 3.40	.23	20 14 23.03	361 57 35.24	+ 53.17	3.86	84 22 24.55	. .
ε Delphini . .	28 22.737	− 0.273	.213	20 28 21.251	288 33 57.21	− 24.60	3.86	10 57 28.75	25.35
ε Aquarii . . .	42 11.701	− 0.161	.197	20 42 10.343	267 44 49.27	− 53.50	3.86	− 9 52 8.09	25.46
h l. c. . . .	53 54.91	+ 3.14	.18	8 53 56.87	372 59 23.21	+ 79.34	3.86	84 35 21.31	. .
1 H. Dr. l. c. . .	21 22 26.46	+ 1.99	.15	9 22 27.30	375 48 0.67	+ 88.74	3.86	81 46 34.45	25.20
ε Pegasi . . .	39 12.987	− 0.265	.131	21 39 11.591	287 1 1.90	− 26.31	3.86	9 24 31.73	25.50
ϑ Aquarii . . .	22 11 29.551	− 0.170	.093	22 11 28.288	269 19 30.43	− 50.66	3.86	− 8 17 24.09	25.47
r	21 42.52	− 4.30	.08	22 21 37.14	363 10 50.59	+ 55.52	3.86	85 35 42.25	. .
η Aquarii . . .	30 9.380	− 0.210	.071	22 30 8.099	276 58 12.03	− 38.72	3.86	− 0 38 30.55	25.45

c +s.006 c' −s.011 ΔT − 1s.173 Nadir 134° 56′ 29″.31 t 52.3

b − .346 at 21h 3m Equator 277 36 3 .86 B 25.73

a + .120 Rate +s.070 T 54

SEPTEMBER 10, 1897. CIR. W, WT. 3, OBSR. T.

Star.	Transit.	Corr.	ΔT	App. R. A.	Circle.	Refr.	Eq.	App. Decl.	φ
	h m s	s	s	h m s	° ′ ″	″	″	° ′ ″	″
51 H. Ceph. l. c. .	18 52 26.64	+ 7.39	+ 0.50	6 52 34.53	259 31 15.48	− 72.11	44.70	87 12 18.67	24.97
λ Urs. Min. . .	19 25 37.56	− 21.21	.54	19 25 16.89	263 19 35.46	− 62.84	44.70	88 59 12.08	25.14
γ Aquilae . . .	41 25.091	− 0.353	.560	19 41 25.298	341 55 22.03	+ 25.36	44.70	10 21 57.31	25.85
g l. c. . . .	54 53.24	+ 19.48	.58	7 55 13.30	261 15 1.93	− 67.76	44.70	88 56 9.47	. .
ϑ Aquilae . . .	20 6 3.049	− 0.285	.589	20 6 3.353	353 24 29.43	+ 39.57	44.70	− 1 7 24.30	25.42
p	14 26.69	− 3.96	.60	20 14 23.33	267 56 13.99	− 53.44	44.70	84 22 24.15	. .
ε Delphini . . .	28 20.977	− 0.357	.615	20 28 21.235	341 19 51.54	+ 24.73	44.70	10 57 28.43	25.49
ε Aquarii . . .	42 9.884	− 0.231	.631	20 42 10.284	362 8 59.01	+ 53.78	44.70	− 9 52 8.09	25.21
h l. c. . . .	53 52.76	+ 3.51	.64	8 53 56.91	256 54 25.23	− 79.73	44.70	84 35 20.80	. .
1 H. Dr. l. c. . .	21 22 24.43	+ 2.18	.68	9 22 27.29	254 5 48.88	− 89.13	44.70	81 46 35.05	25.83
ε Pegasi . . .	39 11.241	− 0.348	.698	21 39 11.591	342 52 47.23	+ 26.43	44.70	9 24 31.04	26.02
ϑ Aquarii . . .	22 11 27.856	− 0.242	.735	22 11 28.349	360 34 18.40	+ 50.93	44.70	− 8 17 24.63	25.65
r	21 41.44	− 4.78	.75	22 21 37.41	266 42 58.01	− 55.82	44.70	85 35 42.51	. .
η Aquarii . . .	30 7.599	− 0.287	.757	30 8.069	352 55 37.19	+ 38.93	44.70	− 0 38 31.42	26.11

c −ˢ.006 c' −ˢ.023 ΔT +0ˢ.656 Nadir 134° 57′ 19″.51 t 51.2

b − .421 at 21ʰ 3ᵐ Equator 352 17 44 .70 B 25.80

a + .112 at 19ʰ.8 Rate −ˢ.01 Rate +ˢ.070 T 53

SEPTEMBER 13, 1897. CIR. W, WT. 4, OBSR. T.

Star.	Transit.	Corr.	ΔT	App. R. A.	Circle.	Refr.	Eq.	App. Decl.	φ
	h m s	s	s	h m s	° ′ ″	″	″	° ′ ″	″
51 H. Ceph. l. c. .	18 52 24.20	+ 6.31	+ 5.80	6 52 36.31	259 31 14.17	− 71.73	44.37	87 12 18.07	24.59
λ Urs. Min. . .	19 25 26.72	− 18.57	.84	19 25 13.99	263 19 34.63	− 62.50	44.37	88 59 12.24	25.34
γ Aquilae . . .	41 19.784	− 0.383	.859	19 41 25.260	. . .	. . .	. .	. . .	. .
g l. c. . . .	54 59.94	+ 17.09	.88	7 55 17.91	261 15 1.23	− 67.41	44.37	88 56 9.45	. .
ϑ Aquilae . . .	20 5 57.741	− 0.324	.892	20 6 3.309	. . .	. . .	. .	. . .	. .
p	14 20.43	− 3.57	.90	20 14 22.76	267 56 12.14	− 53.18	44.37	84 22 25.41	. .
ε Delphini . .	28 15.656	− 0.386	.922	20 28 21.192	. . .	. . .	. .	. . .	. .
ε Aquarii . . .	42 4.606	− 0.279	.940	20 42 10.267	. . .	. . .	. .	. . .	. .
h l. c. . . .	53 48.15	+ 3.12	.96	8 53 57.23	256 54 23.91	− 79.31	44.37	84 35 20.23	. .
1 H. Dr. l. c. . .	21 22 19.85	+ 1.93	.99	9 22 27.77	254 5 46.40	− 88.63	44.37	81 46 33.40	24.85
ε Pegasi . . .	39 5.956	− 0.378	+ 6.016	21 39 11.594	. . .	. . .	. .	. . .	. .
ϑ Aquarii . . .	22 11 22.513	− 0.287	.059	22 11 28.285	. . .	. . .	. .	. . .	. .
r	21 35.78	− 4.49	.07	22 21 37.36	266 42 56.33	− 55.42	44.37	85 35 43.46	. .
η Aquarii . . .	30 2.313	− 0.326	.084	22 30 8.071	. . .	. . .	. .	. . .	. .

c −ˢ.013 c' −ˢ.030 ΔT +5ˢ.967 Nadir 134° 57′ 19″.37 t 54.5

b − .415 at 21ʰ 2ᵐ Equator 352 17 44 .37 B 25.83

a + .052 Rate +ˢ.080 T 56

SEPTEMBER 14, 1897. CIR. W, WT. 4, OBSR. T.

Star.	Transit.	Corr.	ΔT	App. R. A.	Circle.	Refr.	Eq.	App. Decl.	φ
	h m s	s	s	h m s	° ′ ″	″	″	° ′ ″	″
51 H. Ceph. l. c.	18 52 21.89	+ 6.98	+ 7.52	6 52 36.39	259 31 13.07	− 71.38	44.06	87 12 17.63	24.26
λ Urs. Min.	19 25 24.72	−19.93	.56	19 25 12.35	263 19 33.56	− 62.17	44.06	88 59 12.67	25.06
γ Aquilae	41 17.970	− 0.330	.578	19 41 25.218	. . . . .	. . . . .	. . . . .	. . . . .	. .
g l. c.	54 53.25	+18.30	.59	7 55 19.14	261 15 0.26	− 66.99	44.06	88 56 9.21	. .
9 Aquilae	20 5 55.949	− 0.265	.607	20 6 3.291	. . . . .	. . . . .	. . . . .	. . . . .	. .
p	14 18.94	− 3.71	.61	20 14 22.84	267 56 11.34	− 52.80	44.06	84 22 25.52	. .
ε Delphini	28 13.884	− 0.332	.633	20 28 21.185	. . . . .	. . . . .	. . . . .	. . . . .	. .
ε Aquarii	42 2.834	− 0.216	.649	20 42 10.267	. . . . .	. . . . .	. . . . .	. . . . .	. .
h l. c.	53 46.48	+ 3.31	.66	8 53 57.45	256 54 22.69	− 78.74	44.06	84 35 19.89	. .
1 H. Dr. l. c.	21 22 17.90	+ 2.05	.70	9 22 27.65	254 5 45.44	− 87.98	44.06	81 46 33.40	25.16
ε Pegasi	39 4.199	− 0.324	.716	21 39 11.591	. . . . .	. . . . .	. . . . .	. . . . .	. .
9 Aquarii	22 11 20.763	− 0.225	.753	22 11 28.291	. . . . .	. . . . .	. . . . .	. . . . .	. .
r	21 34.46	− 4.48	.77	22 21 37.75	266 42 55.22	− 54.95	44.06	85 35 43.79	. .
η Aquarii	30 0.606	− 0.267	.775	22 30 8.114	. . . . .	. . . . .	. . . . .	. . . . .	. .

c −s.010	c' −s.027	ΔT +7s.671	Nadir 134° 57′ 19″.11	t 58.1
b − .387		at 21h 2m	Equator 352 17 44 .06	B 25.85
a + .105 at 19h.8	Rate −s.01	Rate +s.070		T 60

SEPTEMBER 16, 1897. CIR. W, WT. 5, OBSR. T.

Star.	Transit.	Corr.	ΔT	App. R. A.	Circle.	Refr.	Eq.	App. Decl.	φ
	h m s	s	s	h m s	° ′ ″	″	″	° ′ ″	″
51 H. Ceph. l. c.	18 52 18.77	+ 7.80	+10.89	6 52 37.46	259 31 10.06	− 69.76	42.82	87 12 17.48	24.61
λ Urs. Min.	19 25 20.92	−22.03	.93	19 25 9.82	263 19 31.14	− 60.80	42.87	88 59 12.53	25.80
γ Aquilae	41 14.513	− 0.279	.952	19 41 25.186	341 55 20.37	+ 24.54	42.90	10 21 57.99	25.59
g l. c.	54 50.34	+20.40	.97	7 55 21.71	261 14 57.39	− 65.56	42.92	88 56 8.91	. .
9 Aquilae	20 5 52.506	− 0.210	.985	20 6 3.281	353 24 28.00	+ 38.30	42.94	−1 7 23.36	24.67
p	14 14.82	− 4.04	.99	20 14 21.77	267 56 7.84	− 51.72	42.95	84 22 26.83	. .
ε Delphini	28 10.463	− 0.290	+11.015	20 28 21.188	341 19 49.28	+ 23.94	42.98	10 57 29.76	24.71
ε Aquarii	41 59.370	− 0.163	.033	20 42 10.240	362 8 58.55	+ 52.06	43.00	−9 52 7.61	24.73
h l. c.	53 43.23	+ 3.75	.05	8 53 58.03	256 54 18.96	− 77.18	43.02	84 35 18.76	. .
1 H. Dr. l. c.	21 22 14.37	+ 2.36	.09	9 22 27.82	254 5 41.84	− 86.28	43.07	81 46 32.49	25.19
ε Pegasi	39 0.777	− 0.293	.109	21 39 11.593	342 52 45.27	+ 25.58	43.10	9 24 32.25	25.42
9 Aquarii	22 11 17.363	− 0.194	.152	22 11 28.321	360 34 17.68	+ 49.27	43.15	−8 17 23.80	24.82
r	21 30.28	− 4.92	.17	22 21 36.53	266 42 52.34	− 53.99	43.17	85 35 44.82	. .
η Aquarii	29 57.113	− 0.242	.177	22 30 8.048	352 55 36.00	+ 37.65	43.18	−0 38 30.47	25.46

c s.000	c' −s.017	ΔT +11s.060	Nadir 134° 57′ 17″.90 at 21h.0	t 70.3
b − .380		at 21h 2m	Equator 352 17 42 .92 at 19 .9	B 25.95
a + .171 at 19h.8	Rate −s.01	Rate +s.080	Rates +0.″10	T 71

SEPTEMBER 22, 1897. CIR. W, WT. 4, OBSR. T.

Star.	Transit.	Corr.	ΔT	App. R. A.	Circle.	Refr.	Eq.	App. Decl.	φ
	h m s	s	s	h m s	° ′ ″	″	″	° ′ ″	″
76 Draco. . . .	20 49 43.06	− 2.37	+22.01	20 50 2.70	270 9 8.04	− 48.39	43.28	82 9 23.63	25.37
q	21 19 51.07	− 5.14	.05	21 20 7.98	265 41 37.06	− 56.51	43.28	86 37 2.73	. .
β Aquarii . . .	25 50.577	− 0.270	.061	21 26 12.368	. . . .	. . .	. .	. . . .	. .
ε Pegasi . . .	38 49.820	− 0.346	.079	21 39 11.553	. . . .	. . .	. .	. . . .	. .
9 Aquarii . . .	22 11 6.420	− 0.259	.122	22 11 28.283	. . . .	. . .	. .	. . . .	. .
30 H. Cam. l. c. .	18 8.56	+ 2.07	.13	10 18 32.76	255 23 40.30	− 82.65	43.28	83 4 34.37	25.23
η Aquarii . . .	29 46.141	− 0.297	.147	22 30 7.991	. . . .	. . .	. .	. . . .	. .
λ Aquarri . . .	46 56.999	− 0.260	.169	22 47 18.908	. . . .	. . .	. .	. . . .	. .
s	55 1.90	− 2.93	.18	22 55 21.15	268 30 28.45	− 51.18	43.28	83 48 6.01	. .
i l. c. . . .	23 1 34.69	+ 4.01	.19	11 2 0.89	258 30 30.20	− 73.26	43.28	86 11 33.66	. .
t	27 47.47	− 5.32	.22	23 28 4.37	265 33 56.09	− 56.72	43.28	86 44 43.91	. .
ι Piscium . . .	34 21.584	− 0.324	.233	23 34 43.493	. . . .	. . .	. .	. . . .	. .
u	51 26.80	− 2.50	.25	23 51 46.55	269 41 7.06	− 49.11	43.28	82 37 25.33	. .
γ Pegasi . . .	0 7 38.236	− 0.372	.277	0 8 0.141	. . . .	. . .	. .	. . . .	. .
k l. c. . . .	13 21.17	+ 9.17	.28	12 13 52.62	260 34 46.78	− 67.83	43.28	88 15 55.67	. .
12 Ceti	24 29.306	− 0.278	.300	0 24 51.328	. . . .	. . .	. .	. . . .	. .
l_1 l. c. . . .	47 41.00	+ 2.43	.33	12 48 5.76	256 17 29.10	− 79.80	43.28	83 58 24.02	. .
43 H. Ceph. . .	54 39.84	− 4.10	.34	0 54 58.08	266 36 4.64	− 54.73	43.28	85 42 33.37	25.33

c +ˢ.010 c' −ˢ.007 ΔT +22ˢ.174 Nadir 134° 57′ 18″.06 t 66.7

b − .402 at 22ʰ 50ᵐ Equator 352 17 43 .28 B 26.03

a + .044 Rate +ˢ.080 T 69

SEPTEMBER 23, 1897. CIR. W, WT. 3, OBSR. T.

Star.	Transit.	Corr.	ΔT	App. R. A.	Circle.	Refr.	Eq.	App. Decl.	φ
	h m s	s	s	h m s	° ′ ″	″	″	° ′ ″	″
76 Draco. . . .	20 49 41.72	− 2.72	+23.79	20 50 2.79	270 9 7.84	− 48.25	43.36	82 9 23.77	25.22
q	21 19 50.87	− 5.89	.83	21 20 8.81	265 41 36.79	− 56.35	43.36	86 37 2.92	. .
β Aquarii . . .	25 48.834	− 0.250	.839	21 26 12.423	. . . .	. . .	. .	. . . .	. .
ε Pegasi . . .	38 47.985	− 0.334	.857	21 39 11.508	. . . .	. . .	. .	. . . .	. .
9 Aquarii . . .	22 11 4.635	− 0.239	.900	22 11 28.296	. . . .	. . .	. .	. . . .	. .
30 H. Cam. l. c. .	18 6.70	+ 2.25	.91	10 18 32.86	255 23 39.39	− 82.40	43.36	83 4 33.63	24.57
η Aquarii . . .	29 44.413	− 0.279	.925	22 30 8.059	. . . .	. . .	. .	. . . .	. .
λ Aquarii . . .	46 55.171	− 0.240	.947	22 47 18.878	. . . .	. . .	. .	. . . .	. .
s	55 0.39	− .311	.96	22 55 21.24	268 30 28.33	− 51.03	43.36	83 48 6.06	. .
i l. c. . . .	23 1 32.83	+ 4.33	.97	11 2 1.13	258 30 30.22	− 73.05	43.36	86 11 33.81	. .
t	27 45.88	− 5.52	+24.00	23 28 4.36	265 33 56.18	− 56.56	43.36	86 44 43.74	. .
ι Piscium . . .	34 19.713	− 0.310	.011	23 34 43.414	. . . .	. . .	. .	. . . .	. .
u	51 25.38	− 2.55	.03	23 51 46.86	269 41 7.33	− 48.98	43.36	82 37 25.01	. .
γ Pegasi . . .	0 7 36.443	− 0.361	.055	0 8 0.137	. . . .	. . .	. .	. . . .	. .
k l. c. . . .	13 20.00	+ 9.18	.06	12 13 53.24	260 34 46.30	− 67.66	43.36	88 15 55.28	. .
12 Ceti	24 27.506	− 0.259	.078	0 24 51.325	. . . .	. . .	. .	. . . .	. .
l_1 l. c. . . .	47 39.80	+ 2.33	.11	12 48 6.24	256 17 26.54	− 79.60	43.36	83 58 23.58	. .
43 H. Ceph. . .	54 38.03	− 3.98	.12	0 54 58.17	266 36 3.77	− 54.60	43.36	85 42 34.19	24.61

c +ˢ.006 c' −ˢ.011 ΔT +23ˢ.952 Nadir 134° 57′ 18″.40 t 66.7

b − .399 at 22ʰ 50ᵐ Equator 352 17 43 .36 B 25.96

a + .075 at 22ʰ.6 Rate −ˢ.02 Rate +ˢ.080 T 69

SEPTEMBER 28, 1897. CIR. W, WT. 2, OBSR. T.

Star.	Transit.	Corr.	ΔT	App. R. A.	Circle.	Refr.	Eq.	App. Decl.	φ
	h m s	s	s	h m s	° ′ ″	″	″	° ′ ″	″
76 Draco. . . .	20 49 31.42	− 2.07	+32.56	20 50 1.91	270 9 9.51	− 49.41	45.34	82 9 25.24	25.24
q	21 19 37.88	− 4.31	.60	21 20 6.17	265 41 38.70	− 57.83	45.39	86 37 4.52	. .
ε Pegasi . . .	38 39.271	− 0.412	.619	21 39 11.478	. . . . .	. . .	. .	. . . . .	. .
9 Aquarii . . .	22 10 55.971	− 0.349	.657	22 11 28.279	. . . . .	. . .	. .	. . . . .	. .
30 H. Cam. l. c. .	17 59.09	+ 1.53	.66	10 18 33.28	255 23 42.31	− 84.68	45.49	83 4 32.14	25.00
η Aquarii . . .	29 35.720	− 0.375	.678	22 30 8.023	. . . . .	. . .	. .	. . . . .	. .
λ Aquarii . . .	46 46.550	− 0.350	.699	22 47 18.899	. . . . .	. . .	. .	. . . . .	. .
s	54 50.07	− 2.40	.71	22 55 20.38	268 30 30.51	− 52.52	45.55	83 48 7.56	. .
i l. c. . . .	23 1 26.24	+ 2.98	.72	11 2 1.94	258 30 32.39	− 75.23	45.56	86 11 31.60	. .
t	27 35.34	− 4.17	.75	23 28 3.92	265 33 58.13	− 58.24	45.61	86 44 45.72	. .
ι Piscium . . .	34 11.049	− 0.396	.754	23 34 43.407	. . . . .	. . .	. .	. . . . .	. .
u	51 16.07	− 2.02	.77	23 51 46.82	269 41 9.20	− 50.42	45.65	82 37 26.87	. .
γ Pegasi . . .	0 7 27.843	− 0.429	.792	0 8 0.206	. . . . .	. . .	. .	. . . . .	. .
k l. c. . . .	13 13.74	+ 6.63	.80	12 13 53.17	260 34 48.72	− 69.62	45.68	88 15 53.42	. .
12 Ceti	24 18.899	− 0.362	.812	0 24 51.349	. . . . .	. . .	. .	. . . . .	. .
l_1 l. c. . . .	47 31.79	+ 1.61	.84	12 48 6.24	256 17 29.51	− 81.87	45.74	83 58 21.90	. .
43 H. Ceph. . .	54 28.74	− 3.11	.85	0 54 58.48	266 36 6.90	− 56.15	45.75	85 42 35.00	25.87

c −s.010	c' −s.027	ΔT +32s.716	Nadir 134° 57′ 20″.31 at 23h.0	t 51.7
b − .399		at 23h 2m	Equator 352 17 45 .53 at 22 .7	B 25.87
a − .056 at 22h.6	Rate −s.01	Rate +s.070	Rates +0″.10	T 53

SEPTEMBER 29, 1897. CIR. W, WT. 3, OBSR. T.

Star.	Transit.	Corr.	ΔT	App. R. A.	Circle.	Refr.	Eq.	App. Decl.	φ
	h m s	s	s	h m s	° ′ ″	″	″	° ′ ″	″
76 Draco. . . .	20 49 29.75	− 2.09	+34.18	20 50 1.84	270 9 8.75	− 49.28	45.64	82 9 26.17	24.42
q	21 19 37.02	− 4.43	.22	21 20 6.81	265 41 38.31	− 57.59	45.64	86 37 4.92	. .
β Aquarii . . .	25 38.456	− 0.325	.227	21 26 12.358	. . . . .	. . .	. .	. . . . .	. .
ε Pegasi . . .	38 37.635	− 0.382	.245	21 39 11.498	. . . . .	. . .	. .	. . . . .	. .
9 Aquarii . . .	22 10 54.285	− 0.317	.288	22 11 28.256	. . . . .	. . .	. .	. . . . .	. .
30 H. Cam. l. c. .	17 57.58	+ 1.69	.30	10 18 33.57	255 23 41.94	− 84.26	45.64	83 4 32.04	25.11
η Aquarii . . .	29 34.084	− 0.345	.313	22 30 8.052	. . . . .	. . .	. .	. . . . .	. .
λ Aquarii . . .	46 44.835	− 0.318	.335	22 47 18.852	. . . . .	. . .	. .	. . . . .	. .
s	54 48.96	− 2.56	.34	22 55 20.74	268 30 29.88	− 52.23	45.64	83 48 7.99	. .
i l. c. . . .	23 1 24.03	+ 3.33	.35	11 2 1.71	258 30 31.91	− 74.78	45.64	86 11 31.49	. .
t	27 34.17	− 4.59	.39	23 28 3.97	265 33 57.95	− 57.91	45.64	86 44 45.60	. .
ι Piscium . . .	34 9.399	− 0.367	.399	23 34 43.431	. . . . .	. . .	. .	. . . . .	. .
u	51 14.57	− 2.20	.42	23 51 46.79	269 41 8.71	− 50.15	45.64	82 37 27.08	. .
γ Pegasi . . .	0 7 26.151	− 0.404	.443	0 8 0.190	. . . . .	. . .	. .	. . . . .	. .
k l. c. . . .	13 11.13	+ 7.70	.45	12 13 53.28	260 34 48.56	− 69.31	45.64	88 15 53.61	. .
12 Ceti	24 17.163	− 0.330	.466	0 24 51.299	. . . . .	. . .	. .	. . . . .	. .
l_1 l. c. . . .	47 29.57	+ 1.98	.49	12 48 6.04	256 17 29.44	− 81.61	45.64	83 58 22.19	. .
43 H. Ceph. . .	54 27.94	− 3.56	.51	0 54 58.89	266 36 6.16	− 55.97	45.64	85 42 35.45	25.64

c −s.010	c' −s.027	ΔT +34s.340	Nadir 134° 57′ 20″.55	t 52.4
b − .386		at 22h 50m	Equator 352 17 45 .64	B 25.79
a − .023		Rate +s.080		T 53

OCTOBER 4, 1897. CIR. E, WT. 3, OBSR. T.

Star.	Transit.	Corr.	ΔT	App. R. A.	Circle.	Refr.	Eq.	App. Decl.	φ
	h m s	s	s	h m s	° ′ ″	″	″	° ′ ″	″
76 Draco. . . .	20 49 22.47	− 2.91	+41.63	20 50 1.19	359 44 40.26	+ 48.35	2.17	82 9 26.44	25.68
q	21 19 29.74	− 6.58	.66	21 20 4.82	. . . .	. . .	. .	. . . .	. .
β Aquarii . . .	25 30.651	− 0.089	.666	21 26 12.228	. . . .	. . .	. .	. . . .	. .
ε Pegasi . . .	38 29.986	− 0.189	.678	21 39 11.475	. . . .	. . .	. .	. . . .	. .
9 Aquarii . . .	22 10 46.579	− 0.075	.711	22 11 28.215	. . . .	. . .	. .	. . . .	. .
30 H. Cam. l. c. .	17 49.52	+ 2.96	.72	10 18 34.20	374 30 9.33	+ 82.64	2.17	83 4 30.20	25.42
η Aquarii . . .	29 26.423	− 0.124	.729	22 30 8.028	. . . .	. . .	. .	. . . .	. .
λ Aquarii . . .	46 37.150	− 0.075	.747	22 47 18.822	. . . .	. . .	. .	. . . .	. .
s	54 41.79	− 3.53	.75	22 55 20.01	361 23 21.19	+ 51.16	2.17	83 48 10.18	. .
i l. c. . . .	23 1 15.09	+ 5.42	.76	11 2 2.27	371 23 20.32	+ 73.24	2.17	86 11 28.61	. .
t	27 28.01	− 6.56	.79	23 28 3.24	364 19 54.28	+ 56.67	2.17	86 44 48.78	. .
ι Piscium . . .	34 1.844	− 0.161	.794	23 34 43.477	. . . .	. . .	. .	. . . .	. .
u	51 7.96	− 2.92	.81	23 51 46.85	360 12 43.19	+ 49.07	2.17	82 37 30.09	. .
γ Pegasi . . .	0 7 18.585	− 0.224	.827	0 8 0.188	. . . .	. . .	. .	. . . .	. .
k l. c. . . .	12 59.28	+11.74	.83	12 13 52.85	369 19 3.60	+ 67.79	2.17	88 15 50.78	. .
12 Ceti	24 9.609	− 0.099	.844	0 24 51.354	. . . .	. . .	. .	. . . .	. .
l_1 l. c. . . .	47 20.63	+ 3.22	.87	12 48 5.72	373 36 23.50	+ 79.76	2.17	83 58 19.91	. .
43 H. Ceph. . .	54 22.06	− 4.86	.88	0 54 59.08	363 17 45.97	+ 54.71	2.17	85 42 38.51	24.95

c +s.013	c' −s.004	ΔT +41s.750	Nadir 134° 56′ 27″.57	t 64.1
b − .322		at 22h 50m	Equator 277 36 2 .17	B 25.87
a + .218 at 22h.6	Rate −s.01	Rate +s.060		T 63

OCTOBER 8, 1897. CIR. E, WT. 3, OBSR. T.

Star.	Transit.	Corr.	ΔT	App. R. A.	Circle.	Refr.	Eq.	App. Decl.	φ
	h m s	s	s	h m s	° ′ ″	″	″	° ′ ″	″
76 Draco. . . .	20 49 15.44	− 1.87	+46.92	20 50 0.49	359 44 41.44	+ 49.41	3.94	82 9 26.91	25.91
q	21 19 21.32	− 4.00	.94	21 20 4.26	364 12 13.07	+ 57.76	3.94	86 37 6.89	. .
β Aquarii . . .	25 25.509	− 0.250	.951	21 26 12.210	. . . .	. . .	. .	. . . .	. .
ε Pegasi . . .	38 24.715	− 0.309	.964	21 39 11.370	. . . .	. . .	. .	. . . .	. .
9 Aquarii . . .	22 10 41.429	− 0.242	.992	22 11 28.179	. . . .	. . .	. .	. . . .	. .
30 H. Cam. l. c. .	17 46.23	+ 1.55	.99	10 18 34.77	374 30 10.85	+ 84.51	3.94	83 4 28.58	24.96
η Aquarii . . .	29 21.259	− 0.271	+47.008	22 30 7.996	. . . .	. . .	. .	. . . .	. .
λ Aquarii . . .	46 32.065	− 0.243	.024	22 47 18.846	. . . .	. . .	. .	. . . .	. .
s	54 35.05	− 2.31	.03	22 55 19.77	361 23 23.42	+ 52.34	3.94	83 48 11.82	. .
i l. c. . . .	23 1 13.27	+ 3.06	.04	11 2 3.37	371 23 21.38	+ 74.93	3.94	86 11 27.63	. .
t	27 19.29	− 4.15	.06	23 28 2.20	364 19 56.84	+ 58.02	3.94	86 44 50.92	. .
ι Piscium . . .	33 56.651	− 0.292	.067	23 34 43.426	. . . .	. . .	. .	. . . .	. .
u	51 1.29	− 1.97	.08	23 51 46.40	360 12 45.04	+ 50.24	3.94	82 37 31.34	. .
γ Pegasi . . .	0 7 13.442	− 0.328	.096	0 8 0.210	. . . .	. . .	. .	. . . .	. .
k l. c. . . .	12 59.96	+ 7.03	.10	12 13 54.09	369 19 5.09	+ 69.38	3.94	88 15 49.47	. .
12 Ceti	24 4.523	− 0.256	.112	0 24 51.379	. . . .	. . .	. .	. . . .	. .
l_1 l. c. . . .	47 17.18	+ 1.83	.13	12 48 6.14	373 36 24.96	+ 81.58	3.94	83 58 17.40	. .
43 H. Ceph. . .	54 15.23	− 3.21	.14	0 54 59.16	363 17 47.86	+ 55.96	3.94	85 42 39.88	25.10

c +s.010	c' −s.007	ΔT +47s.027	Nadir 134° 56′ 29″.33	t 51.2
b − .340		at 22h 50m	Equator 277 36 3 .94	B 25.77
a + .009		Rate +s.054		T 53

OCTOBER 11, 1897. CIR. E, WT. 3, OBSR. T.

Star.	Transit.	Corr.	ΔT	App. R. A.	Circle.	Refr.	Eq.	App. Decl.	φ
	h m s	s	s	h m s	° ′ ″	″	″	° ′ ″	″
76 Draco. . . .	20 49 11.25	− 2.08	+50.95	20 50 0.12	359 44 42.70	+ 48.41	3.63	82 9 27.48	25.94
q	21 19 16.46	− 4.49	.97	21 20 2.94	364 12 15.06	+ 56.59	3.63	86 37 8.02	. .
β Aquarii . . .	25 21.359	− 0.203	.981	21 26 12.137	. . . .	. . .	. .	. . . .	. .
ε Pegasi . . .	38 20.579	− 0.267	.992	21 39 11.304	. . . .	. . .	. .	. . . .	. .
9 Aquarii . . .	22 10 37.279	− 0.192	+51.019	22 11 28.106	. . . .	. . .	. .	. . . .	. .
30 H. Cam. l. c. .	17 42.35	+ 1.80	.02	10 18 35.17	374 30 12.95	+ 82.85	3.63	83 4 27.83	25.14
η Aquarii . . .	29 17.151	− 0.226	.034	22 30 7.959	. . . .	. . .	. .	. . . .	. .
λ Aquarii . . .	46 27.908	− 0.194	.049	22 47 18.763	. . . .	. . .	. .	. . . .	. .
s	54 30.84	− 2.44	.05	22 55 19.45	361 23 24.89	+ 51.29	3.63	83 48 12.55	. .
i l. c. . . .	23 1 9.07	+ 3.36	.06	11 2 3.49	371 23 23.42	+ 73.22	3.63	86 11 26.99	. .
t	27 15.64	− 4.37	.08	23 28 2.35	364 19 57.99	+ 56.77	3.63	86 44 51.13	. .
ι Piscium . . .	33 52.637	− 0.249	.090	23 34 43.478	. . . .	. . .	. .	. . . .	. .
u	50 57.33	− 2.03	.10	23 51 46.40	360 12 46.86	+ 49.14	3.63	82 37 32.47	. .
γ Pegasi . . .	0 7 9.421	− 0.291	.116	0 8 0.246	. . . .	. . .	. .	. . . .	. .
k l. c. . . .	12 56.04	+ 7.36	.12	12 13 54.52	369 19 7.48	+ 67.94	3.63	88 15 48.21	. .
12 Ceti	24 0.544	− 0.209	.130	0 24 51.465	. . . .	. . .	. .	. . . .	. .
l_1 l. c. . . .	47 13.14	+ 1.90	.15	12 48 6.19	273 36 27.00	+ 80.05	3.63	83 58 16.58	. .
43 H. Ceph. . .	54 11.44	− 3.23	.16	0 54 59.37	363 17 49.52	+ 54.90	3.63	85 42 40.79	25.29

c +s.013 c' −s.004 ΔT +51s.052 Nadir 134° 56′ 29″.09 t 62.4

b − .323 at 22h 50m Equator 277 36 3 .63 B 25.83

a + .054 at 22h.6 Rate −s.01 Rate +s.050 T 63

OCTOBER 18, 1897. CIR. E, WT. 4, OBSR. T.

Star.	Transit.	Corr.	ΔT	App. R. A.	Circle.	Refr.	Eq.	App. Decl.	φ
	h m s	s	s	h m s	° ′ ″	″	″	° ′ ″	″
76 Draco. . . .	20 49 0.72	− 1.89	+60.18	20 49 59.01	359 44 43.49	+ 48.90	3.42	82 9 28.97	25.80
q	21 19 4.70	− 4.16	.21	21 20 0.75	364 12 15.63	+ 57.21	3.42	86 37 9.42	. .
β Aquarii . . .	25 12.116	− 0.222	.211	21 26 12.105	. . . .	. . .	. .	. . . .	. .
ε Pegasi . . .	38 11.329	− 0.284	.222	21 39 11.267	. . . .	. . .	. .	. . . .	. .
9 Aquarii . . .	22 10 28.050	− 0.214	.249	22 11 28.085	. . . .	. . .	. .	. . . .	. .
30 H. Cam. l. c. .	17 34.22	+ 1.74	.25	10 18 36.21	374 30 13.71	+ 83.87	3.42	83 4 25.84	25.47
η Aquarii . . .	29 7.873	− 0.243	.264	22 30 7.894	. . . .	. . .	. .	. . . .	. .
λ Aquarii . . .	46 18.673	− 0.214	.279	22 47 18.738	. . . .	. . .	. .	. . . .	. .
s	54 20.82	− 2.48	.28	22 55 18.62	361 23 26.69	+ 51.99	3.42	83 48 15.26	. .
i l. c. . . .	23 1 1.40	+ 3.46	.29	11 2 5.15	371 23 24.60	+ 74.47	3.42	86 11 24.35	. .
t	27 5.25	− 4.60	.31	23 28 0.96	364 19 59.53	+ 57.69	3.42	86 44 53.82	. .
ι Piscium . . .	33 43.351	− 0.267	.318	23 34 43.402	. . . .	. . .	. .	. . . .	. .
u	50 47.76	− 2.17	.33	23 51 45.92	360 12 48.33	+ 49.99	3.42	82 37 34.90	. .
γ Pegasi . . .	0 7 0.199	− 0.305	.345	0 8 0.239	. . . .	. . .	. .	. . . .	. .
k l. c. . . .	12 47.26	+ 8.20	.35	12 13 55.81	369 19 8.49	+ 69.06	3.42	88 15 45.87	. .
12 Ceti	23 51.244	− 0.228	.360	0 24 51.376	. . . .	. . .	. .	. . . .	. .
l_1 l. c. . . .	47 3.83	+ 2.24	.38	12 48 6.45	373 36 28.26	+ 81.25	3.42	83 58 13.91	. .
43 H. Ceph. . .	54 2.42	− 3.68	.39	0 54 59.13	363 17 50.88	+ 55.72	3.42	85 42 43.18	25.79

c s.000 c' −s.017 ΔT +60s.281 Nadir 134° 56′ 28″.99 t 55.1

b − .319 at 22h 50m Equator 277 36 3 .42 B 25.80

a + .040 at 22h.6 Rate +s.01 Rate +s.050 T 56

OCTOBER 28, 1897. CIR. E, WT. 4, OBSR. T.

Star.	Transit.	Corr.	ΔT	App. R. A.	Circle.	Refr.	Eq.	App. Decl.	φ
	h m s	s	s	h m s	° ′ ″	″	″	° ′ ″	″
l_2 l. c. . . .	0 46 59.85	+ 1.80	+72.68	12 48 14.33	373 36 50.42	+ 82.38	4.59	83 57 51.79	. .
ε Piscium . . .	56 27.909	− 0.297	.686	0 57 40.298	. . . .	. . .	. .	. . . .	. .
α Urs. Min. . .	1 21 25.91	−10.35	.71	1 22 28.27	366 21 0.01	+ 62.91	4.59	88 45 58.33	25.35
m l. c. . . .	43 51.35	+ 1.57	.73	13 45 5.65	374 18 55.42	+ 84.68	4.59	83 15 44.49	.
a	2 0 5.82	− 2.05	.75	2 1 16.52	360 40 15.95	+ 51.52	4.59	83 5 2.88	. .
o Ceti	13 0.666	− 0.259	.763	2 14 13.170	. . . .	. . .	. .	. . . .	. .
ξ_2 Ceti	21 33.122	− 0.300	.774	2 22 45.596	. . . .	. . .	. .	. . . .	. .
δ Ceti	33 4.280	− 0.271	.783	2 34 16.792	. . . .	. . .	. .	. . . .	. .
α Ceti	55 45.830	− 0.284	.806	2 56 58.352	. . . .	. . .	. .	. . . .	. .
b	3 7 10.24	− 2.54	.81	3 8 20.51	362 8 12.50	+ 54.21	4.59	84 33 2.12	. .
o Tauri	18 8.365	− 0.303	.828	3 19 20.890	. . . .	. . .	. .	. . . .	. .
c	32 24.08	− 3.64	.84	3 33 33.28	363 54 40.61	+ 57.68	4.59	86 19 33.70	. .
o l. c. . . .	52 36.16	+ 1.57	.86	15 53 50.59	374 19 19.15	+ 84.64	4.59	83 15 20.80	. .
Gr. 750	4 3 35.12	− 2.89	.87	4 4 45.10	362 52 16.74	+ 55.59	4.59	85 17 7.74	24.86
ν Eridani . . .	30 2.066	− 0.259	.900	4 31 14.707	. . . .	. . .	. .	. . . .	. .
π 5 Orionis . .	47 44.930	− 0.279	.918	4 48 57.569	. . . .	. . .	. .	. . . .	. .
ε Urs. Min. l. c. .	55 3.07	+ 1.32	.93	16 56 17.32	375 22 10.92	+ 88.22	4.59	82 12 25.45	25.01

c +ˢ.006 c' −ˢ.011 ΔT +72ˢ.807 Nadir 134° 56′ 29″.70 t 50.1
b − .331 at 2ʰ 57ᵐ Equator 277 36 4 .59 B 25.96
a + .005 Rate +ˢ.060 T 51

NOVEMBER 1, 1897. CIR. E, WT. 4, OBSR. T.

Star.	Transit.	Corr.	ΔT	App. R. A.	Circle.	Refr.	Eq.	App. Decl.	φ
	h m s	s	s	h m s	° ′ ″	″	″	° ′ ″	″
l_2 l. c. . . .	0 47 55.19	+ 1.82	+17.36	12 48 14.37	373 36 51.53	+ 81.10	3.45	83 57 50.82	. .
ε Piscium . . .	57 23.230	− 0.307	.361	0 57 40.284	. . . .	. . .	. .	. . . .	. .
α Urs. Min. . .	1 22 19.54	−10.37	.37	1 22 26.54	366 21 1.01	+ 62.01	3.45	88 45 59.57	25.78
m l. c. . . .	44 46.64	+ 1.55	.38	13 45 5.57	374 18 57.17	+ 83.51	3.45	83 15 42.77	. .
a	2 1 1.38	− 2.02	.38	2 1 16.74	360 40 17.15	+ 50.83	3.45	83 5 4.53	. .
o Ceti	13 56.037	− 0.270	.386	2 14 13.153	. . . .	. . .	. .	. . . .	. .
ξ_2 Ceti	22 28.572	− 0.309	.389	2 22 45.652	. . . .	. . .	. .	. . . .	. .
δ Ceti	33 59.694	− 0.281	.393	2 34 16.806	. . . .	. . .	. .	. . . .	. .
α Ceti	56 41.259	− 0.294	.401	2 56 58.366	. . . .	. . .	. .	. . . .	. .
b	3 8 5.67	− 2.42	.40	3 8 20.65	362 8 13.03	+ 53.52	3.45	84 33 3.10	. .
o Tauri	19 3.886	− 0.312	.408	3 19 20.972	. . . .	. . .	. .	. . . .	. .
c	33 19.82	− 3.41	.41	3 33 33.82	363 54 42.04	+ 56.97	3.45	86 19 35.56	. .
o l. c. . . .	53 31.10	+ 1.39	.42	15 53 49.91	374 19 20.46	+ 83.61	3.45	83 15 19.38	. .
Gr. 750	4 4 31.04	− 2.67	.42	4 4 45.79	362 52 17.46	+ 54.92	3.45	85 17 8.93	25.07
μ Eridani . . .	30 57.630	− 0.270	.432	4 31 14.792	. . . .	. . .	. .	. . . .	. .
π 5 Orionis . .	48 40.501	− 0.290	.438	4 48 57.649	. . . .	. . .	. .	. . . .	. .
ε Urs. Min. l. c. .	55 57.91	+ 1.11	.44	16 56 16.46	375 22 12.47	+ 87.15	3.45	82 12 23.83	24.62

c +ˢ.013 c' −ˢ.004 ΔT +17ˢ.401 Nadir 134° 56′ 28″.60 t 56.2
b − .339 at 2ʰ 58ᵐ Equator 277 36 3 .45 B 25.93
a − .014 at 3ʰ.8 Rate −ˢ.01 Rate +ˢ.020 T 57

NOVEMBER 3, 1897. CIR. E, WT. 3, OBSR. T.

Star.	Transit.	Corr.	ΔT	App. R. A.	Circle.	Refr.	Eq.	App. Decl.	φ
	h m s	s	s	h m s	° ′ ″	″	″	° ′ ″	″
l_2 l. c. . . .	0 47 56.12	+ 0.20	+18.47	12 48 14.79	373 36 51.97	+ 83.55	4.99	83 57 49.47	. .
ε Piscium . . .	57 22.294	− 0.421	.471	0 57 40.344	. . . .	. . .	. .	. . . .	. .
α Urs. Min. . .	1 22 12.16	− 3.72	.48	1 22 26.92	366 21 1.94	+ 63.81	4.88	88 46 0.87	25.25
m l. c. . . .	44 47.00	+ 0.20	.49	13 45 5.69	374 18 56.75	+ 85.88	4.80	83 15 42.17	. .
a	2 0 59.43	− 1.05	.50	2 1 16.88	360 40 17.76	+ 52.22	4.75	83 5 5.23	. .
o Ceti	13 55.051	− 0.404	.509	2 14 13.156	. . . .	. . .	. .	. . . .	. .
δ Ceti	33 58.709	− 0.410	.519	2 34 16.818	. . . .	. . .	. .	. . . .	. .
α Ceti	56 40.294	− 0.415	.530	2 56 58.409	. . . .	. . .	. .	. . . .	. .
b	3 8 3.59	− 1.30	.53	3 8 20.82	362 8 13.86	+ 54.94	4.53	84 33 4.27	. .
o Tauri	19 2.915	− 0.424	.542	3 19 21.033	. . . .	. . .	. .	. . . .	. .
c	33 17.23	− 1.80	.55	3 33 33.98	363 54 42.57	+ 58.45	4.44	86 19 36.58	. .
o l. c. . . .	53 30.86	+ 0.36	.56	15 53 49.78	374 19 20.15	+ 85.66	4.37	83 15 18.56	. .
Gr. 750	4 4 29.19	− 1.53	.57	4 4 46.23	362 52 17.66	+ 56.23	4.34	85 17 9.55	25.15
ν Eridani . . .	30 56.587	− 0.404	.577	4 31 14.760	. . . .	. . .	. .	. . . .	. .
π 5 Orionis . .	48 39.581	− 0.413	.586	4 48 57.754	. . . .	. . .	. .	. . . .	. .
ε Urs. Min. l. c. .	55 57.38	+ 0.33	.59	16 56 16.30	375 22 11.03	+ 89.32	4.16	82 12 23.81	25.27

c +s.016 c' −s.001 ΔT +18s.533 Nadir 134° 56′ 29″.79 at 2h.7 t 42.7

b − .379 at 3h 3m Equator 277 36 4 .45 at 3 .5 B 25.89

a − .177 at 3h.8 Rate +s.01 Rate +s.030 Rates −0″.20 T 42

NOVEMBER 8, 1897. CIR. E, WT. 2, OBSR. T.

Star.	Transit.	Corr.	ΔT	App. R. A.	Circle.	Refr.	Eq.	App. Decl.	φ
	h m s	s	s	h m s	° ′ ″	″	″	° ′ ″	″
l_2 l. c. . . .	0 47 52.11	+ 2.21	+20.81	12 48 15.13	373 36 52.50	+ 83.76	3.91	83 57 47.65	. .
ε Piscium . . .	57 19.787	− 0.296	.809	0 57 40.300	. . . .	. . .	. .	. . . .	. .
α Urs. Min. . .	1 22 17.56	−12.40	.82	1 22 25.98	366 21 2.74	+ 63.97	3.91	88 46 2.80	25.00
m l. c. . . .	44 42.87	+ 1.96	.82	13 45 5.65	374 18 58.28	+ 86.11	3.91	83 15 39.52	. .
a	2 0 58.30	− 2.41	.83	2 1 16.72	360 40 18.93	+ 52.38	3.91	83 5 7.40	. .
o Ceti	13 52.630	− 0.248	.834	2 14 13.216	. . . .	. . .	. .	. . . .	. .
ξ_2 Ceti	22 25.143	− 0.299	.837	2 22 45.681	. . . .	. . .	. .	. . . .	. .
δ Ceti	33 56.294	− 0.263	.841	2 34 16.872	. . . .	. . .	. .	. . . .	. .
α Ceti	56 37.901	− 0.280	.849	2 56 58.470	. . . .	. . .	. .	. . . .	. .
b	3 8 3.13	− 3.00	.85	3 8 20.98	362 8 14.46	+ 55.09	3.91	84 33 5.64	. .
o Tauri	19 0.522	− 0.302	.856	3 19 21.076	. . . .	. . .	. .	. . . .	. .
c	33 18.35	− 4.32	.86	3 33 34.89	363 54 43.00	+ 58.52	3.91	86 19 37.61	. .
o l. c. . . .	53 26.57	+ 1.96	.87	15 53 49.40	374 19 20.93	+ 85.77	3.91	83 15 17.21	. .
Gr. 750	4 4 29.38	− 3.43	.87	4 4 46.82	362 52 18.39	+ 56.35	3.91	85 17 10.83	25.37
ν Eridani . . .	30 54.316	− 0.248	.880	4 31 14.948	. . . .	. . .	. .	. . . .	. .
π 5 Oreonis . .	48 37.173	− 0.274	.886	4 48 57.785	. . . .	. . .	. .	. . . .	. .
ε Urs. Min. l. c. .	55 53.36	+ 1.66	.89	16 56 15.91	375 22 11.84	+ 89.52	3.91	82 12 22.55	25.34

c +s.006 c' −s.011 ΔT +20s.849 Nadir 134° 56′ 29″.11 t 42.5

b − .353 at 2h 58m Equator 277 36 3 .91 B 25.96

a + .046 Rate +s.020 T 44

NOVEMBER 10, 1897. CIR. W, WT. 4, OBSR. T.

Star.	Transit.	Corr.	ΔT	App. R. A.	Circle.	Refr.	Eq.	App. Decl.	φ
	h m s	s	s	h m s	° ′ ″	″	″	° ′ ″	″
l_2 l. c. . . .	0 47 50.94	+ 2.97	+21.32	12 48 15.23	256 16 53.88	− 81.28	45.00	83 57 47.60	. .
ε Piscium . . .	57 19.327	− 0.305	.318	0 57 40.340	. . . .	. . .	. .	. . . .	. .
α Urs. Min. . .	1 22 19.10	−15.76	.32	1 22 24.66	263 32 43.59	− 62.18	45.00	88 46 3.59	24.40
m l. c. . . .	44 42.06	+ 2.57	.33	13 45 5.96	255 34 48.34	− 83.76	45.00	83 15 39.58	. .
a	2 0 58.23	− 2.95	.33	2 1 16.61	269 13 28.56	− 50.99	45.00	83 5 7.43	. .
o Ceti	13 52.141	− 0.248	.330	2 14 13.223	. . . .	. . .	. .	. . . .	. .
ξ_2 Ceti	22 24.650	− 0.307	.332	2 22 45.675	. . . .	. . .	. .	. . . .	. .
δ Ceti	33 55.834	− 0.265	.334	2 34 16.903	. . . .	. . .	. .	. . . .	. .
α Ceti	56 37.427	− 0.284	.337	2 56 58.480	. . . .	. . .	. .	. . . .	. .
b	3 8 3.50	− 3.60	.34	3 8 21.24	267 45 32.17	− 53.69	45.00	84 33 6.52	. .
o Tauri	19 0.085	− 0.311	.341	3 19 21.115	. . . .	. . .	. .	. . . .	. .
c	33 19.03	− 5.17	.34	3 33 35.20	265 59 4.40	− 57.12	45.00	86 19 37.72	. .
o l. c. . . .	53 25.46	+ 2.41	.35	15 53 49.22	255 34 25.92	− 83.81	45.00	83 15 17.11	. .
Gr. 750	4 4 29.80	− 4.04	.35	4 4 47.11	267 1 28.66	− 55.06	45.00	83 17 11.40	24.87
ν Eridani . . .	30 53.827	− 0.247	.353	4 31 14.933	. . . .	. . .	. .	. . . .	. .
π 5 Orionis . .	48 36.756	− 0.278	.356	4 48 57.834	. . . .	. . .	. .	. . . .	. .
ε Urs. Min. l. c. .	55 52.22	+ 1.99	.36	16 56 15.57	254 31 34.03	− 87.40	45.00	82 12 21.63	24.45

c s.000 c' −s.017 ΔT +21s.338 Nadir 134° 57′ 20″.32 t 55.1

b − .378 at 2h 58m Equator 352 17 45 .00 B 25.94

a + .086 at 3h.8 Rate −s.01 Rate +s.010 T 57

NOVEMBER 12, 1897. CIR. W, WT. 3, OBSR. T.

Star.	Transit.	Corr.	ΔT	App. R. A.	Circle.	Refr.	Eq.	App. Decl.	φ
	h m s	s	s	h m s	° ′ ″	″	″	° ′ ″	″
l_2 l. c. . . .	0 47 51.64	+ 2.29	+21.90	12 48 15.83	256 16 56.63	− 82.10	47.23	83 57 47.30	. .
ε Piscium . . .	57 18.827	− 0.411	.901	0 57 40.317	. . . .	. . .	. .	. . . .	. .
α Urs. Min. . .	1 22 15.52	−12.99	.91	1 22 24.44	263 32 46.09	− 62.77	47.23	88 46 3.91	25.21
m l. c. . . .	44 42.61	+ 1.94	.91	13 45 6.46	255 34 50.92	− 84.57	47.23	83 15 39.12	. .
a	2 0 57.15	− 2.53	.91	2 1 16.53	269 13 30.26	− 51.47	47.23	83 5 8.44	. .
o Ceti	13 51.670	− 0.368	.917	2 14 13.219	. . . .	. . .	. .	. . . .	. .
ξ_2 Ceti	22 24.200	− 0.413	.918	2 22 45.705	. . . .	. . .	. .	. . . .	. .
δ Ceti	33 55.349	− 0.381	.921	2 34 16.889	. . . .	. . .	. .	. . . .	. .
α Ceti	56 36.999	− 0.395	.925	2 56 58.529	. . . .	. . .	. .	. . . .	. .
b	3 8 1.85	− 3.06	.93	3 8 20.72	267 45 33.91	− 54.16	47.23	84 33 7.48	. .
o Tauri	18 59.578	− 0.416	.930	3 19 21.092	. . . .	. . .	. .	. . . .	. .
c	33 16.85	− 4.32	.93	3 33 34.46	265 59 6.24	− 57.63	47.23	86 19 38.62	. .
o l. c. . . .	53 25.64	+ 1.77	.94	15 53 49.35	255 34 28.41	− 84.63	47.23	83 15 16.55	. .
Gr. 750	4 4 29.29	− 3.41	.94	4 4 47.82	267 1 30.55	− 55.63	47.23	85 17 12.31	25.02
ν Eridani . . .	30 53.391	− 0.367	.944	4 31 14.968	. . . .	. . .	. .	. . . .	. .
π 5 Orionis . .	48 36.356	− 0.390	.948	4 48 57.914	. . . .	. . .	. .	. . . .	. .
ε Urs. Min. l. c. .	55 52.37	+ 1.43	.95	16 56 15.75	254 31 37.69	− 88.55	47.23	82 12 21.91	25.72

c −s.010 c' −s.027 ΔT +21s.926 Nadir 134° 57′ 22″.17 t 48.8

b − .419 at 2h 58m Equator 352 17 47 .23 B 25.87

a − .035 at 3h.8 Rate −s.01 Rate +s.012 T 50

NOVEMBER 15, 1897. CIR. W, WT. 3, OBSR. T.

Star.	Transit.	Corr.	ΔT	App. R. A.	Circle.	Refr.	Eq.	App. Decl.	φ
	h m s	s	s	h m s	° ′ ″	″	″	° ′ ″	″
l_2 l. c.	0 47 50.72	+ 2.18	+22.84	12 48 15.74	256 16 54.10	− 82.76	46.16	83 57 45.18	. .
ε Piscium	57 17.813	− 0.389	.843	0 57 40.267	. . . .	. . .	. .	. . . .	. .
α Urs. Min.	1 22 13.71	−13.00	.85	1 22 23.56	263 32 44.33	− 63.13	46.16	88 46 4.96	24.87
m l. c.	44 41.38	+ 1.98	.85	13 45 6.21	255 34 48.26	− 84.92	46.16	83 15 37.18	. .
a	2 0 56.50	− 2.64	.86	2 1 16.72	269 13 28.23	− 51.67	46.16	83 5 9.60	. .
o Ceti	13 50.727	− 0.337	.859	2 14 13.249	. . . .	. . .	. .	. . . .	. .
ξ_2 Ceti	22 23.264	− 0.392	.860	2 22 45.732	. . . .	. . .	. .	. . . .	. .
δ Ceti	33 54.434	− 0.354	.863	2 34 16.943	. . . .	. . .	. .	. . . .	. .
α Ceti	56 36.014	− 0.371	.867	2 56 58.510	. . . .	. . .	. .	. . . .	. .
b	3 8 2.06	− 3.33	.87	3 8 21.60	267 45 32.21	− 54.33	46.16	84 33 8.28	. .
o Tauri	18 58.664	− 0.395	.872	3 19 21.141	. . . .	. . .	. .	. . . .	. .
c	33 18.15	− 4.84	.87	3 33 36.18	265 59 3.97	− 57.80	46.16	86 19 39.99	. .
o l. c.	53 23.94	+ 2.13	.88	15 53 48.95	255 34 25.45	− 84.81	46.16	83 15 14.48	. .
Gr. 750	4 4 29.09	− 3.89	.88	4 4 48.08	267 1 28.48	− 55.72	46.16	85 17 13.40	24.64
ν Eridani	30 52.491	− 0.337	.886	4 31 15.040	. . . .	. . .	. .	. . . .	. .
π 5 Orionis	48 35.413	− 0.364	.890	4 48 57.939	. . . .	. . .	. .	. . . .	. .
ε Urs. Min. l. c.	55 50.44	+ 1.87	.89	16 56 15.20	254 31 34.27	− 88.46	46.16	82 12 19.65	24.17

c s.000 c' −s.017 ΔT +22s.868 Nadir 134° 57′ 21″.49 t 48.2

b − .434 at 2h 58m Equator 352 17 46 .16 B 25.93

a + .014 at 3h.8 Rate +s.01 Rate +s.012 T 51

NOVEMBER 16, 1897. CIR. W, WT. 4, OBSR. T.

Star.	Transit.	Corr.	ΔT	App. R. A.	Circle.	Refr.	Eq.	App. Decl.	φ
	h m s	s	s	h m s	° ′ ″	″	″	° ′ ″	″
l_2 l. c.	0 47 49.70	+ 3.08	+23.22	12 48 16.00	256 16 53.47	− 82.47	45.94	83 57 45.06	. .
ε Piscium	57 17.406	− 0.358	.219	0 57 40.267	. . . .	. . .	. .	. . . .	. .
α Urs. Min.	1 22 16.09	−16.49	.23	1 22 22.83	263 32 43.10	− 62.99	45.94	88 46 5.83	24.40
m l. c.	44 40.34	+ 2.65	.23	13 45 6.22	255 34 47.91	− 84.79	45.94	83 15 37.18	. .
a	2 0 56.42	− 3.12	.24	2 1 16.54	269 13 27.95	− 51.60	45.94	83 5 9.59	. .
o Ceti	13 50.306	− 0.301	.244	2 14 13.249	. . . .	. . .	. .	. . . .	. .
ξ_2 Ceti	22 22.850	− 0.361	.247	2 22 45.736	. . . .	. . .	. .	. . . .	. .
δ Ceti	33 53.984	− 0.318	.251	2 34 16.917	. . . .	. . .	. .	. . . .	. .
α Ceti	56 35.641	− 0.339	.259	2 56 58.561	. . . .	. . .	. .	. . . .	. .
b	3 8 2.08	− 3.80	.26	3 8 21.54	267 45 31.28	− 54.32	45.94	84 33 8.98	. .
o Tauri	18 58.250	− 0.365	.266	3 19 21.151	. . . .	. . .	. .	. . . .	. .
c	33 17.78	− 5.45	.27	3 33 35.60	265 59 3.71	− 57.81	45.94	86 19 40.04	. .
o l. c.	53 23.06	+ 2.49	.28	15 53 48.83	255 34 25.43	− 84.84	45.94	83 15 14.65	. .
Gr. 750	4 4 28.74	− 4.27	.28	4 4 47.75	267 1 27.96	− 55.73	45.94	85 17 13.71	24.75
ν Eridani	30 52.056	− 0.300	.290	4 31 15.046	. . . .	. . .	. .	. . . .	. .
π 5 Orionis	48 34.948	− 0.331	.296	4 48 57.949	. . . .	. . .	. .	. . . .	. .
ε Urs. Min. l. c.	55 49.72	+ 2.05	.30	16 56 15.07	254 31 34.38	− 88.45	45.94	82 12 19.99	24.93

c −s.010 c' −s.027 ΔT +23s.259 Nadir 134° 57′ 21″.20 t 50.9

b − .416 at 2h 58m Equator 352 17 45 .94 B 26.04

a + .064 at 3h.8 Rate −s.01 Rate +s.020 T 52

DECEMBER 3, 1897. CIR. W, WT. 3, OBSR. T.

Star.	Transit.	Corr.	ΔT	App. R. A.	Circle.	Refr.	Eq.	App. Decl.	φ
	h m s	s	s	h m s	° ′ ″	″	″	° ′ ″	″
n l. c. . . .	3 8 58.04	+ 6.86	+28.53	15 9 33.43	259 56 17.50	− 73.27	47.77	87 37 16.46	. .
o Tauri	18 53.142	− 0.414	.531	3 19 21.259	. . . .	. . .	. .	. . . .	. .
ε Eridani . . .	27 41.164	− 0.316	.534	3 28 9.382	. . . .	. . .	. .	. . . .	. .
ν Tauri	57 17.591	− 0.399	.544	3 57 45.736	. . . .	. . .	. .	. . . .	. .
Gr. 750	4 4 24.25	− 4.09	.55	4 4 48.71	267 1 25.28	− 56.87	47.77	85 17 19.36	25.71
ν Eridani . . .	30 47.106	− 0.349	.555	4 31 15.312	. . . .	. . .	. .	. . . .	. .
π 5 Orionis . .	48 30.063	− 0.381	.561	4 48 58.243	. . . .	. . .	. .	. . . .	. .
d	55 32.94	− 4.67	.56	4 55 56.83	266 29 5.36	− 57.94	47.77	85 49 40.35	. .
γ Orionis . . .	5 19 13.413	− 0.401	.571	5 19 41.583	. . . .	. . .	. .	. . . .	. .
e	29 10.64	− 4.11	.57	5 29 35.10	267 9 57.83	− 56.57	47.77	85 8 46.51	. .
δ Urs. Min. l. c. .	6 4 12.73	+ 5.12	.59	18 4 46.44	258 55 52.24	− 75.90	47.77	86 36 48.57	25.27
8 Monoc. . . .	17 55.506	− 0.393	.591	6 18 23.704	. . . .	. . .	. .	. . . .	. .
S Monoc. . . .	34 55.421	− 0.422	.596	6 35 23.595	. . . .	. . .	. .	. . . .	. .
18 Monoc. . . .	42 6.184	− 0.382	.599	6 42 34.401	. . . .	. . .	. .	. . . .	. .
51 H. Ceph. . .	52 54.73	− 7.11	.60	6 53 16.22	265 6 25.62	− 60.43	47.77	87 12 22.58	26.16
λ Gemin. . . .	7 11 47.609	− 0.459	.609	7 12 15.759	. . . .	. . .	. .	. . . .	. .
λ Urs. Min. l. c. .	22 35.96	+ 18.62	.61	19 23 23.19	261 18 8.51	− 69.33	47.77	88 59 11.41	25.51
f	52 20.00	− 3.76	.62	7 52 44.86	267 57 45.68	− 54.82	47.77	84 20 56.91	. .

c −s.003	*c′* −s.020	ΔT +28s.569	Nadir 134° 57′ 22″.16	*t* 42.9
b − .461		at 5h 13m	Equator 352 17 47 .77	B 26.07
a + .030 at 6h.1	Rate +s.01	Rate +s.020		T 42

DECEMBER 16, 1897. CIR. W, WT. 2, OBSR. T.

Star.	Transit.	Corr.	ΔT	App. R. A.	Circle.	Refr.	Eq.	App. Decl.	φ
	h m s	s	s	h m s	° ′ ″	″	″	° ′ ″	″
n l. c. . . .	3 8 58.08	+ 5.85	+31.00	15 9 34.93	259 56 14.69	− 73.82	49.30	87 37 11.57	. .
o Tauri	18 50.714	− 0.392	.000	3 19 21.322	. . . .	. . .	. .	. . . .	. .
ε Eridani . . .	27 38.754	− 0.315	.002	3 28 9.441	. . . .	. . .	. .	. . . .	. .
ν Tauri	57 15.163	− 0.380	.007	3 57 45.790	. . . .	. . .	. .	. . . .	. .
Gr. 750	4 4 20.82	− 3.45	.01	4 4 48.38	267 1 22.76	− 57.33	49.30	85 17 23.87	25.47
ν Eridani . . .	30 44.733	− 0.341	.012	4 31 15.404	. . . .	. . .	. .	. . . .	. .
π 5 Orionis . .	48 27.743	− 0.366	.015	4 48 58.392	. . . .	. . .	. .	. . . .	. .
d	55 31.58	− 3.86	.02	4 55 58.74	266 29 2.77	− 58.39	49.30	85 49 44.92	. .
γ Orionis . . .	5 19 11.103	− 0.382	.020	5 19 41.741	. . . .	. . .	. .	. . . .	. .
e	29 9.34	− 3.36	.02	5 29 37.00	267 9 55.75	− 56.99	49.30	85 8 50.54	. .
δ Urs. Min. l. c. .	6 4 8.99	+ 4.01	.03	18 4 44.03	258 55 50.65	− 76.67	49.30	86 36 44.68	25.48
8 Monoc. . . .	17 53.253	− 0.375	.030	6 18 23.908	. . . .	. . .	. .	. . . .	. .
S Monoc. . . .	34 53.184	− 0.398	.033	6 35 23.819	. . . .	. . .	. .	. . . .	. .
18 Monoc. . . .	42 3.963	− 0.366	.034	6 42 34.631	. . . .	. . .	. .	. . . .	. .
51 H. Ceph. . .	52 54.85	− 5.61	.04	6 53 20.28	265 6 24.35	− 61.44	49.30	87 12 26.39	25.78
λ Gemin. . . .	7 11 45.476	− 0.427	.039	7 12 16.088	. . . .	. . .	. .	. . . .	. .
λ Urs. Min. l. c. .	22 26.36	+ 14.20	.04	19 23 11.60	261 18 8.26	− 70.44	49.30	88 59 8.52	25.77
f	52 20.10	− 2.93	.05	7 52 48.22	267 57 45.08	− 55.61	49.30	84 20 59.83	. .

c −s.003	*c′* −s.020	ΔT +31s.019	Nadir 134° 57′ 23″.70	*t* 31.9
b − .411		at 5h 13m	Equator 352 17 49. 30	B 25.76
a − .015		Rate +s.010		T 33

DECEMBER 20, 1897. CIR. W, WT. 2, OBSR. T.

Star.	Transit.	Corr.	ΔT	App. R. A.	Circle.	Refr.	Eq.	App. Decl.	φ
	h m s	s	s	h m s	° ′ ″	″	″	° ′ ″	″
n l. c. . . .	3 8 59.60	+ 6.02	+31.06	15 9 36.68	259 56 15.72	− 74.27	50.04	87 37 11.41	. .
ε Eridani . . .	27 38.564	− 0.317	.060	3 28 9.307	. . . . .	. . .	. .	. . . . .	. .
ν Tauri	57 15.143	− 0.376	.060	3 57 45.827	. . . . .	. . .	. .	. . . . .	. .
Gr. 750	4 4 21.04	− 3.42	.06	4 4 48.68	267 1 22.79	− 57.67	50.04	85 17 24.92	25.58
ν Eridani . . .	30 44.673	− 0.341	.060	4 31 15.392	. . . . .	. . .	. .	. . . . .	. .
π 5 Orionis . .	48 27.673	− 0.362	.060	4 48 58.371	. . . . .	. . .	. .	. . . . .	. .
d	55 31.49	− 3.72	.06	4 55 58.83	266 29 2.73	− 58.95	50.04	85 49 46.26	. .
e	5 29 9.56	− 3.20	.06	5 29 37.42	267 9 56.14	− 57.53	50.04	85 8 51.43	. .
δ Urs. Min. l. c. .	6 4 8.32	+ 3.73	.06	18 4 43.11	258 55 50.90	− 77.28	50.04	86 36 43.58	25.61
51 H. Ceph. . .	52 54.82	− 5.11	.06	6 53 20.77	265 6 24.39	− 61.82	50.04	87 12 27.47	25.77
λ Gemin. . . .	7 11 45.526	− 0.418	.060	7 12 16.168	. . . . .	. . .	. .	. . . . .	. .
λ Urs. Min. l. c. .	22 26.50	+12.58	.06	19 23 10.14	261 18 8.45	− 70.83	50.04	88 59 7.58	25.86
f	52 20.50	− 2.61	.06	7 52 48.95	267 57 46.59	− 55.89	50.04	84 20 59.34	. .

c −ˢ.006 c' −ˢ.023 ΔT +31ˢ.060 Nadir 134° 57′ 24″.40 t 29.1

b − .392 Equator 352 17 50 .04 B 25.77

a − .027 at 6ʰ.1 Rate −ˢ.01 Rate .000 T 29

DECEMBER 21, 1897. CIR. W, WT. 2, OBSR. T.

Star.	Transit.	Corr.	ΔT	App. R. A.	Circle.	Refr.	Eq.	App. Decl.	φ
	h m s	s	s	h m s	° ′ ″	″	″	° ′ ″	″
n l. c. . . .	3 8 59.53	+ 6.53	+31.15	15 9 37.21	259 56 12.25	− 74.00	48.80	87 37 9.45	. .
o Tauri	18 50.514	− 0.417	.147	3 19 21.244	. . . . .	. . .	. .	. . . . .	. .
ε Eridani . . .	27 38.624	− 0.339	.147	3 28 9.432	. . . . .	. . .	. .	. . . . .	. .
ν Tauri	57 15.043	− 0.404	.147	3 57 45.786	. . . . .	. . .	. .	. . . . .	. .
Gr. 750	4 4 21.51	− 3.72	.15	4 4 48.94	267 1 20.78	− 57.53	48.80	85 17 25.55	25.04
ν Eridani . . .	30 44.673	− 0.366	.147	4 31 15.454	. . . . .	. . .	. .	. . . . .	. .
π 5 Orionis . .	48 27.643	− 0.390	.147	4 48 58.400	. . . . .	. . .	. .	. . . . .	. .
d	55 31.85	− 4.07	.15	4 55 58.93	266 29 1.03	− 58.72	48.80	85 49 46.49	. .
γ Orionis . . .	5 19 11.053	− 0.407	.147	5 19 41.793	. . . . .	. . .	. .	. . . . .	. .
e	29 9.74	− 3.50	.15	5 29 37.39	267 9 54.16	− 57.32	48.80	85 8 51.96	. .
δ Urs. Min. l. c. .	6 4 7.70	+ 4.06	.15	18 4 42.91	258 55 48.61	− 77.02	48.80	86 36 42.79	24.91
8 Monoc. . . .	17 53.243	− 0.400	.147	6 18 23.990	. . . . .	. . .	. .	. . . . .	. .
S Monoc. . . .	34 53.164	− 0.422	.147	6 35 23.889	. . . . .	. . .	. .	. . . . .	. .
18 Monoc. . . .	42 4.023	− 0.392	.147	6 42 34.778	. . . . .	. . .	. .	. . . . .	. .
51 H. Ceph. . .	52 55.40	− 5.61	.15	6 53 20.94	265 6 22.86	− 61.47	48.80	87 12 27.41	25.87
λ Gemin. . . .	7 11 45.426	− 0.452	.147	7 12 16.121	. . . . .	. . .	. .	. . . . .	. .
λ Urs. Min. l. c. .	22 24.04	+13.82	.15	19 23 9.01	261 18 6.20	− 70.41	48.80	88 59 6.99	25.29
f	52 20.86	− 2.87	.15	7 52 49.14	267 57 44.20	− 55.57	48.80	84 21 0.17	. .

c −ˢ.006 c' −ˢ.023 ΔT +31ˢ.147 Nadir 134° 57′ 23″.37 t 33.6

b − .429 Equator 352 17 48 .80 B 25.91

a − .027 at 6ʰ.1 Rate −ˢ.01 Rate .000 T 35

DECEMBER 22, 1897. CIR. E, WT. 2, OBSR. T.

Star.	Transit.	Corr.	ΔT	App. R. A.	Circle.	Refr.	Eq.	App. Decl.	φ
	h m s	s	s	h m s	° ′ ″	″	″	° ′ ″	″
n l. c. . . .	3 8 58.44	+ 5.88	+31.16	15 9 35.48	369 57 39.77	+ 73.74	3.96	87 37 10.45	. .
o Tauri . . .	18 50.530	− 0.388	.162	3 19 21.304	. . . .	. . .	. .	. . . .	. .
ε Eridani . . .	27 38.508	− 0.305	.162	3 28 9.365	. . . .	. . .	. .	. . . .	. .
ν Tauri	57 15.001	− 0.375	.162	3 57 45.788	. . . .	. . .	. .	. . . .	. .
Gr. 750	4 4 20.92	− 3.49	.16	4 4 48.59	362 52 29.91	+ 57.32	3.96	85 17 [23.27]	[27.27]
ν Eridani . . .	30 44 609	− 0.334	.162	4 31 15.437	. . . .	. . .	. .	. . . .	. .
π 5 Orionis . .	48 27.573	− 0.359	.162	4 48 58.376	. . . .	. . .	. .	. . . .	. .
d	55 31.78	− 3.89	.16	4 55 59.05	363 24 51.85	+ 58.43	3.96	85 49 46.34	. .
γ Orionis . . .	5 19 11.044	− 0.378	.162	5 19 41.828	. . . .	. . .	. .	. . . .	. .
e	29 9.89	− 3.40	.16	5 29 37.65	362 43 58.93	+ 57.05	3.96	85 8 52.02	. .
δ Urs. Min. l. c. .	6 4 7.89	+ 4.02	.16	18 4 43.07	370 58 5.07	+ 76.67	3.96	86 36 42.22	24.30
8 Monoc. . . .	17 53.251	− 0.370	.162	6 18 24.043	. . . .	. . .	. .	. . . .	. .
S Monoc. . . .	34 53.116	− 0.394	.162	6 35 23.884	. . . .	. . .	. .	. . . .	. .
18 Monoc. . . .	42 3.973	− 0.361	.162	6 42 34.774	. . . .	. . .	. .	. . . .	. .
51 H. Ceph. . .	52 55.67	− 5.65	.16	6 53 21.18	364 47 30.72	+ 61.22	3.96	87 12 27.98	25.22
λ Gemin. . . .	7 11 45.477	− 0.426	.162	7 12 16.213	. . . .	. . .	. .	. . . .	. .
λ Urs. Min. l. c. .	22 23.10	+14.24	.16	19 23 8.50	368 35 46.98	+ 70.12	3.96	88 59 6.86	25.07
f	52 20.92	− 2.96	.16	7 52 49.12	361 56 8.76	+ 55.36	3.96	84 21 0.16	. .

c +s.013 *c′* −s.004 ΔT +31s.162 Nadir 134° 56′ 29″.04 *t* 35.6

b − .429 Equator 277 36 3 .96 B 25.92

a − .007 Rate .000 T 36

DECEMBER 24, 1897. CIR. E, WT. 3, OBSR. T.

Star.	Transit.	Corr.	ΔT	App. R. A.	Circle.	Refr.	Eq.	App. Decl.	φ
	h m s	s	s	h m s	° ′ ″	″	″	° ′ ″	″
n l. c. . . .	3 9 1.92	+ 4.47	+31.07	15 9 37.46	369 57 40.49	+ 73.69	3.84	87 37 9.66	. .
o Tauri . . .	18 50.630	− 0.439	.073	3 19 21.264	. . . .	. . .	. .	. . . .	. .
ε Eridani . . .	27 38.650	− 0.373	.073	3 28 9.350	. . . .	. . .	. .	. . . .	. .
ν Tauri	57 15.173	− 0.428	.073	3 57 45.818	. . . .	. . .	. .	. . . .	. .
Gr. 750	4 4 20.43	− 2.87	.07	4 4 48.63	362 52 32.90	+ 57.00	3.84	85 17 26.06	25.41
ν Eridani . . .	30 44.716	− 0.395	.073	4 31 15.394	. . . .	. . .	. .	. . . .	. .
π 5 Orionis . .	48 27.709	− 0.415	.073	4 48 58.367	. . . .	. . .	. .	. . . .	. .
d	55 30.55	− 3.18	.07	4 55 58.44	363 24 52.48	+ 58.04	3.84	85 49 46.68	. .
γ Orionis . . .	5 19 11.209	− 0.430	.073	5 19 41.852	. . . .	. . .	. .	. . . .	. .
e	29 9.46	− 2.80	.07	5 29 37.73	362 43 59.63	+ 56.69	3.84	85 8 52.48	. .
δ Urs. Min. l. c. .	6 4 8.82	+ 3.02	.07	18 4 42.91	370 58 5.44	+ 76.29	3.84	86 36 42.11	25.15
8 Monoc. . . .	17 53.387	− 0.424	.073	6 18 24.036	. . . .	. . .	. .	. . . .	. .
S Monoc. . . .	34 53.365	− 0.443	.073	6 35 23.995	. . . .	. . .	. .	. . . .	. .
18 Monoc. . . .	42 4.130	− 0.417	.073	6 42 34.786	. . . .	. . .	. .	. . . .	. .
51 H. Ceph. . .	52 55.16	− 4.47	.07	6 53 21.76	364 47 31.15	+ 61.10	3.84	87 12 28.41	25.67
λ Gemin . . .	7 11 45.670	− 0.469	.073	7 12 16.274	. . . .	. . .	. .	. . . .	. .
λ Urs. Min. l. c. .	22 25.19	+11.06	.07	19 23 7.32	368 35 47.55	+ 69.97	3.84	88 59 6.32	25.36
f	52 20.83	− 2.46	.07	7 52 49.44	361 56 9.49	+ 55.14	3.84	84 21 0.79	. .

c +s.016 *c′* −s.001 ΔT +31s.073 Nadir 134° 56′ 29″.19 *t* 40.0

b − .446 Equator 277 36 3 .84 B 26.06

a − .086 Rate .000 T 39

DECEMBER 27, 1897. CIR. E, WT. 4, OBSR. T.

Star.	Transit.	Corr.	ΔT	App. R. A.	Circle.	Refr.	Eq.	App. Decl.	φ
	h m s	s	s	h m s	° ′ ″	″	″	° ′ ″	″
n l. c. . . .	3 8 58.01	+ 7.80	+31.09	15 9 36.90	369 57 42.03	+ 71.48	2.48	87 37 8.97	. .
o Tauri . . .	18 50.508	− 0.354	.094	3 19 21.248	. . . .	. . .	. .	. . . .	. .
ε Eridani . . .	27 38.550	− 0.254	.094	3 28 9.390	. . . .	. . .	. .	. . . .	. .
ν Tauri . . .	57 15.030	− 0.337	.094	3 57 45.787	. . . .	. . .	. .	. . . .	. .
Gr. 750 . . .	4 4 21.65	− 4.26	.09	4 4 48.48	362 52 33.95	+ 55.44	2.48	85 17 26.91	25.62
ν Eridani . . .	30 44.601	− 0.288	.094	4 31 15.407	. . . .	. . .	. .	. . . .	. .
π 5 Orionis . .	48 27.601	− 0.318	.094	4 48 58.377	. . . .	. . .	. .	. . . .	. .
d	55 32.40	− 4.69	.09	4 55 58.80	363 24 54.41	+ 56.57	2.48	85 49 48.50	. .
γ Orionis . . .	5 19 11.066	− 0.341	.094	5 19 41.819	. . . .	. . .	. .	. . . .	. .
e	29 10.67	− 4.03	.09	5 29 37.73	362 44 1.11	+ 55.26	2.48	85 8 53.89	. .
δ Urs. Min. l. c. .	6 4 6.84	+ 4.97	.09	18 4 42.90	370 58 7.05	+ 74.28	2.48	86 36 41.15	25.37
8 Monoc. . . .	17 53.387	− 0.330	.094	6 18 24.151	. . . .	. . .	. .	. . . .	. .
S Monoc. . . .	34 53.272	− 0.361	.094	6 35 24.005	. . . .	. . .	. .	. . . .	. .
18 Monoc. . . .	42 4.073	− 0.321	.094	6 42 34.846	. . . .	. . .	. .	. . . .	. .
51 H. Ceph. . .	52 59.43	− 6.57	.09	6 53 23.95	364 47 33.06	+ 59.37	2.48	87 12 29.95	25.19
λ Gemin. . . .	7 11 45.577	− 0.398	.094	7 12 16.273	. . . .	. . .	. .	. . . .	. .
λ Urs. Min. l. c. .	22 19.17	+16.72	.09	19 23 6.98	368 35 48.57	+ 68.01	2.48	88 59 5.90	25.96
f	52 22.19	− 3.32	.09	7 52 49.96	361 56 10.13	+ 53.68	2.48	84 21 1.33	. .

c +s.010 c' −s.007 ΔT +31s.094 Nadir 134° 56′ 27″.89 t 55.0

b − .423 Equator 277 36 2 .48 B 26.15

a + .061 at 6h.1 Rate −s.01 Rate .000 T 54

DECEMBER 28, 1897. CIR. E, WT. 4, OBSR. T.

Star.	Transit.	Corr.	ΔT	App. R. A.	Circle.	Refr.	Eq.	App. Decl.	φ
	h m s	s	s	h m s	° ′ ″	″	″	° ′ ″	″
n l. c. . . .	3 8 57.70	+ 7.18	+33.62	15 9 38.50	369 57 43.04	+ 70.74	2.60	87 37 8.82	. .
o Tauri . . .	18 47.965	− 0.364	.634	3 19 21.235	. . . .	. . .	. .	. . . .	. .
ε Eridani . . .	27 35.943	− 0.266	.644	3 28 9.321	. . . .	. . .	. .	. . . .	. .
ν Tauri . . .	57 12.459	− 0.347	.676	3 57 45.788	. . . .	. . .	. .	. . . .	. .
Gr. 750 . . .	4 4 18.49	− 4.08	.68	4 4 48.09	362 52 35.05	+ 54.83	2.60	85 17 27.28	25.48
ν Eridani . . .	30 42.001	− 0.298	.713	4 31 15.416	. . . .	. . .	. .	. . . .	. .
π 5 Orionis . .	48 25.030	− 0.330	.732	4 48 58.432	. . . .	. . .	. .	. . . .	. .
d	55 29.57	− 4.57	.74	4 55 58.74	363 24 55.06	+ 55.92	2.60	85 49 48.38	. .
γ Orionis . . .	19 8.430	− 0.351	.766	5 19 41.845	. . . .	. . .	. .	. . . .	. .
e	29 8.14	− 3 96	.78	5 29 37.96	362 44 2.06	+ 54.65	2.60	85 8 54.11	. .
δ Urs. Min. l. c. .	6 4 4.48	+ 4.96	.81	18 4 43.25	370 58 8.23	+ 73.49	2.60	86 36 40.88	25.39
8 Monoc. . . .	17 50.580	− 0.342	.831	6 18 24.069	. . . .	. . .	. .	. . . .	. .
S Monoc. . . .	34 50.558	− 0.371	.849	6 35 24.036	. . . .	. . .	. .	. . . .	. .
18 Monoc. . . .	42 1.330	− 0.331	.857	6 42 34.856	. . . .	. . .	. .	. . . .	. .
51 H. Ceph. . .	52 56.54	− 6.69	.87	6 53 23.72	364 47 33.86	+ 58.61	2.60	87 12 29.87	25.54
λ Gemin. . . .	7 11 42.827	− 0.365	.890	7 12 16.352	. . . .	. . .	. .	. . . .	. .
λ Urs. Min. l. c. .	22 13.98	+17.26	.90	19 23 5.14	368 35 50.56	+ 67.20	2.60	88 59 4.84	25.17
f	52 19.38	− 3.45	.93	7 52 49.86	361 56 11.37	+ 53.16	2.60	84 21 1.93	. .

c +s.003 c' −s.014 ΔT +33s.758 Nadir 134° 56′ 27″.94 t 60.8

b − .422 at 5h 13m Equator 277 36 2.60 B 26.17

a + .052 Rate +s.066 T 59

JANUARY 26, 1898. CIR. E, WT. 2, OBSR. T.

Star.	Transit.	Corr.	ΔT	App. R. A.	Circle.	Refr.	Eq.	App. Decl.	φ
	h m s	s	s	h m s	° ′ ″	″	″	° ′ ″	″
8 Monoc. . . .	6 18 27.696	− 0.509	− 3.020	6 18 24.167	. . . .	. . .	. .	. . . .	. .
S Monoc. . . .	35 27.665	− 0.534	.021	6 35 24.110	. . . .	. . .	. .	. . . .	. .
18 Monoc. . . .	42 38.556	− 0.499	.021	6 42 35.036	. . . .	. . .	. .	. . . .	. .
51 H. Ceph. . .	53 31.04	− 6.27	.02	6 53 21.75	364 47 43.53	+ 61.31	5.15	87 12 39.69	24.75
λ Urs. Min. l. c. .	7 22 46.21	+15.46	.02	19 22 58.65	368 35 58.81	+ 70.31	5.15	88 58 56.03	25.53
25 Monoc. . . .	32 18.376	− 0.470	.023	7 32 14.883	. . . .	. . .	. .	. . . .	. .
g	57 55.66	−15.78	.02	7 57 36.86	366 31 20.13	+ 65.33	5.15	88 56 20.31	. .
p l. c. . . .	8 13 58.38	+ 2.42	.03	20 13 57.77	373 12 25.73	+ 83.71	5.15	84 22 15.71	. .
Br. 1197 . . .	20 39.856	− 0.470	.024	8 20 36.362	. . . .	. . .	. .	. . . .	. .
h	54 33.00	− 3.46	.03	8 54 26.51	362 10 29.03	+ 55.94	5.15	84 35 19.82	. .
9 Hydrae . . .	9 9 9.576	− 0.500	.026	9 9 6.050	. . . .	. . .	. .	. . . .	. .
1 H. Draco. . .	22 52.69	− 2.42	.03	9 22 47.24	359 21 42.55	+ 50.73	5.15	81 46 28.13	25.51
π Leon. . . .	54 55.555	− 0.526	.027	9 54 52.002	. . . .	. . .	. .	. . . .	. .
α Leon. . . .	10 3 2.594	− 0.545	.028	10 2 59.021	. . . .	. . .	. .	. . . .	. .
r l. c. . . .	21 6.04	+ 3.22	.03	22 21 6.23	371 58 49.36	+ 79.77	5.15	85 35 56.02	. .

c −ˢ.015 c' −ˢ.032 ΔT − 3ˢ.024 Nadir 134° 56′ 30″.50 t 32.7

b − .522 at 8ʰ 4ᵐ Equator 277 36 5 .15 B 25.81

a − .082 Rate −ˢ.002 T 33

JANUARY 27, 1898. CIR. E, WT. 4, OBSR. T.

Star.	Transit.	Corr.	ΔT	App. R. A.	Circle.	Refr.	Eq.	App. Decl.	φ
	h m s	s	s	h m s	° ″ ′	″	″	° ′ ″	″
8 Monoc. . . .	6 18 27.794	− 0.457	− 3.166	6 18 24.171	. . . .	. . .	. .	. . . .	. .
S Monoc. . . .	35 27.793	− 0.485	.168	6 35 24.140	. . . .	. . .	. .	. . . .	. .
18 Monoc. . . .	42 38.616	− 0.446	.168	6 42 35.002	. . . .	. . .	. .	. . . .	. .
51 H. Ceph. . .	53 33.34	− 7.20	.17	6 53 22.97	364 47 43.31	+ 60.37	3.94	87 12 39.74	25.11
λ Urs. Min. l. c. .	7 22 45.45	+18.22	.17	19 23 0.50	368 35 58.96	+ 69.17	3.94	88 58 55.81	25.74
25 Monoc. . . .	32 18.487	− 0.412	.173	7 32 14.902	. . . .	. . .	. .	. . . .	. .
g	57 57.39	−18.33	.18	7 57 35.88	366 31 19.43	+ 64.17	3.94	88 56 19.66	. .
p l. c. . . .	8 13 58.05	+ 2.97	.18	20 13 57.84	373 12 25.93	+ 82.19	3.94	84 22 15.82	. .
Br. 1197 . . .	20 39.959	− 0.413	.178	8 20 36.368	. . . .	. . .	. .	. . . .	. .
h	54 34.62	− 3.90	.18	8 54 27.54	362 10 29.59	+ 55.00	3.94	84 35 20.05	. .
1 H. Draco. . .	9 22 53.24	− 2.70	.18	9 22 47.36	359 21 42.46	+ 49.85	3.94	81 46 28.37	25.68
π Leon. . . .	54 55.658	− 0.477	.187	9 54 51.994	. . . .	. . .	. .	. . . .	. .
α Leon.. . . .	10 3 2.721	− 0.498	.188	10 2 59.035	. . . .	. . .	. .	. . . .	. .
r l. c. . . .	21 5.83	+ 3.91	.19	22 21 6.55	371 58 49.88	+ 78.33	3.94	85 35 55.63	. .

c −ˢ.015 c' −ˢ.032 ΔT − 3ˢ.176 Nadir 134° 56′ 29″.41 t 38.1

b − .500 at 7ʰ 55ᵐ Equator 277 36 3 .94 B 25.66

a − .005 Rate −ˢ.006 T 38

JANUARY 28, 1898. CIR. E, WT. 3, OBSR. T.

Star.	Transit.	Corr.	ΔT	App. R. A.	Circle.	Refr.	Eq.	App. Decl.	φ
	h m s	s	s	h m s	° ′ ″	″	″	° ′ ″	″
8 Monoc.	6 18 28.009	− 0.498	− 3.384	6 18 24.127	. . .	. . .	. .	. . .	. .
S Monoc.	35 28.150	− 0.525	.386	6 35 24.239	. . .	. . .	. .	. . .	. .
18 Monoc.	42 38.851	− 0.487	.387	6 42 34.977	. . .	. . .	. .	. . .	. .
51 H. Ceph.	53 33.61	− 7.40	.39	6 53 22.82	364 47 43.11	+ 60.84	4.20	87 12 39.75	25.36
λ Urs. Min. l. c.	7 22 46.63	+19.11	.39	19 23 2.35	368 35 59.19	+ 69.68	4.20	88 58 55.33	25.55
25 Monoc.	32 18.730	− 0.455	.395	7 32 14.880	. . .	. . .	. .	. . .	. .
g	57 56.96	−17.56	.40	7 57 36.00	366 31 19.06	+ 64.68	4.20	88 56 19.54	. .
p l. c.	8 13 58.52	+ 2.69	.40	20 13 57.81	373 12 26.09	+ 82.93	4.20	84 22 15.18	. .
Br. 1197	20 40.237	− 0.456	.402	8 20 36.379	. . .	. . .	. .	. . .	. .
h	54 34.04	− 3.56	.41	8 54 27.07	362 10 29.47	+ 55.59	4.20	84 35 20.86	. .
9 Hydrae	9 9 9.994	− 0.488	.409	9 9 6.097	. . .	. . .	. .	. . .	. .
1 H. Draco.	22 52.90	− 2.41	.41	9 22 47.08	359 21 42.59	+ 50.42	4.20	81 46 28.81	25.52
π Leon.	54 55.950	− 0.517	.416	9 54 52.017	. . .	. . .	. .	. . .	. .
α Leon.	10 3 2.985	− 0.538	.417	10 2 59.030	. . .	. . .	. .	. . .	. .
r l. c.	21 6.90	+ 2.86	.42	22 21 6.34	371 58 49.59	+ 79.37	4.20	85 35 55.24	. .

c −ˢ.015 c' −ˢ.032 ΔT −3ˢ.400 Nadir 134° 56′ 29″.66 t 37.0

b − .526 at 8ʰ 4ᵐ Equator 277 36 4.20 B 25.85

a − .043 at 7ʰ.9 Rate −ˢ.03 Rate −ˢ.009 T 38

FEBRUARY 4, 1898. CIR. E, WT. 3, OBSR. T.

Star.	Transit.	Corr.	ΔT	App. R. A.	Circle.	Refr.	Eq.	App. Decl.	φ
	h m s	s	s	h m s	° ′ ″	″	″	° ′ ″	″
S Monoc.	6 35 28.636	− 0.555	− 3.961	6 35 24.120	. . .	. . .	. .	. . .	. .
18 Monoc.	42 39.430	− 0.512	.961	6 42 34.957	. . .	. . .	. .	. . .	. .
51 H. Ceph.	53 33.47	− 7.62	.96	6 53 21.89	364 47 45.12	+ 59.36	2.97	87 12 41.51	25.51
λ Urs. Min. l. c.	7 22 48.11	+18.87	.96	19 23 3.02	368 36 1.43	+ 68.09	2.97	88 58 53.45	25.72
25 Monoc.	32 19.316	− 0.471	.964	7 32 14.881	. . .	. . .	. .	. . .	. .
g	57 55.30	−18.59	.96	7 57 32.75	366 31 22.61	+ 63.22	2.97	88 56 22.86	. .
p l. c.	8 13 59.18	+ 2.91	.97	20 13 58.12	373 12 28.73	+ 80.99	2.97	84 22 13.25	. .
Br. 1197	20 40.830	− 0.467	.966	8 20 36.397	. . .	. . .	. .	. . .	. .
h	54 34.65	− 3.86	.97	8 54 26.82	362 10 31.73	+ 54.30	2.97	84 35 23.06	. .
9 Hydrae	9 9 10.551	− 0.493	.968	9 9 6.090	. . .	. . .	. .	. . .	. .
1 H. Draco.	22 54.12	− 2.63	.97	9 22 47.52	359 21 44.57	+ 49.28	2.97	81 46 30.88	25.31
π Leon.	54 56.593	− 0.517	.971	9 54 52.105	. . .	. . .	. .	. . .	. .
α Leon.	10 3 3.678	− 0.536	.971	10 2 59.171	. . .	. . .	. .	. . .	. .
r l. c.	21 5.96	+ 3.47	.97	22 21 5.46	371 58 51.85	+ 77.60	2.97	85 35 53.52	. .

c − .015 c' −ˢ.032 ΔT −3ˢ.966 Nadir 134° 56′ 28″.45 t 48.7

b − .543 at 8ʰ.5 Rate +ˢ.01 at 8ʰ 20ᵐ Equator 277 36 2 .97 B 25.88

a − .036 at 7 .9 Rate −ˢ.01 Rate −ˢ.003 T 50

FEBRUARY 12, 1898. CIR. W, WT. 4, OBSR. T.

Star.	Transit.	Corr.	ΔT	App. R. A.	Circle.	Refr.	Eq.	App. Decl.	φ
	h m s	s	s	h m s	° ′ ″	″	″	° ′ ″	″
8 Monoc.	6 18 28.894	− 0.405	− 4.420	6 18 24.069					
S Monoc.	35 28.955	− 0.439	.420	6 35 24.096					
18 Monoc.	42 39.724	− 0.393	.420	6 42 34.911					
51 H. Ceph.	53 32.48	− 7.89	.42	6 53 20.17	265 6 4.33	− 60.14	47.92	87 12 43.73	25.43
λ Urs. Min. l. c.	7 22 51.59	+20.28	.42	19 23 7.45	261 17 47.74	− 68.83	47.92	88 58 50.99	25.63
25 Monoc.	32 19.624	− 0.353	.422	7 32 14.849					
g	57 56.54	−20.20	.42	7 57 31.92	263 22 26.48	− 63.84	47.92	88 56 25.28	
p l. c.	8 13 59.58	+ 3.36	.42	20 13 58.52	256 41 20.23	− 81.78	47.92	84 22 10.53	
Br. 1197	20 41.214	− 0.356	.424	8 20 36.434					
h	54 35.44	− 4.14	.42	8 54 26.88	267 43 17.49	− 54.78	47.92	84 35 25.21	
1 H. Draco.	9 22 55.03	− 2.90	.43	9 22 47.70	270 32 4.21	− 49.69	47.92	81 46 33.40	25.32
π Leon.	54 57.075	− 0.430	.427	9 54 52.218					
α Leon.	10 3 4.086	− 0.455	.427	10 2 59.204					
r l. c.	21 5.21	+ 4.40	.43	22 21 5.18	257 54 56.82	− 78.13	47.92	85 35 50.77	

c s.000	c' − s.017	ΔT − 4s.423	Nadir 134° 57′ 22″.45	t 47.8
b − .499		at 7h 55m	Equator 352 17 47 .92	B 26.08
a + .060		Rate − s.002		T 49

FEBRUARY 14, 1898. CIR. W, WT. 3, OBSR. T.

Star.	Transit.	Corr.	ΔT	App. R. A.	Circle.	Refr.	Eq.	App. Decl.	φ
	h m s	s	s	h m s	° ′ ″	″	″	° ′ ″	″
S Monoc.	6 35 28.871	− 0.575	− 4.267	6 35 24.029					
18 Monoc.	42 39.677	− 0.530	.267	6 42 34.880					
51 H. Ceph.	53 32.20	− 8.21	.27	6 53 19.72	265 6 1.33	− 58.23	47.28	87 12 44.18	25.51
λ Urs. Min. l. c.	7 22 52.73	+21.11	.27	19 23 9.57	261 17 44.60	− 66.70	47.28	88 58 50.62	25.86
25 Monoc.	32 19.613	− 0.493	.264	7 32 14.856					
g	57 55.80	−20.75	.26	7 57 30.79	263 22 23.76	− 61.92	47.28	88 56 25.44	
p l. c.	8 13 59.70	+ 3.10	.26	20 13 58.54	256 41 17.06	− 79.38	47.28	84 22 10.40	
h	54 35.39	− 4.14	.26	8 54 26.99	267 43 14.65	− 53.22	47.28	84 35 25.85	
9 Hydrae	9 9 10.963	− 0.531	.260	9 9 6.172					
1 H. Draco.	22 55.03	− 2.84	.26	9 22 47.93	270 32 1.92	− 48.25	47.28	81 46 33.61	25.75
π Leon.	54 57.028	− 0.565	.257	9 54 52.206					
α Leon.	10 3 4.136	− 0.589	.257	10 2 59.290					
r l. c.	21 4.95	+ 3.63	.26	22 21 4.32	257 54 53.62	− 75.71	47.28	85 35 50.63	

c s.000	c' − s.017	ΔT − 4s.262	Nadir 134° 57′ 21″.69	t 61.2
b − .601		at 8h 19m	Equator 352 17 47 .28	B 25.99
a − .028 at 7h.9	Rate − s.02	Rate + s.003		T 60

FEBRUARY 15, 1898. CIR. W, WT. 3, OBSR. T.

Star.	Transit.	Corr.	ΔT	App. R. A.	Circle.	Refr.	Eq.	App. Decl.	φ
	h m s	s	s	h m s	° ′ ″	″	″	° ′ ″	″
8 Monoc. . . .	6 18 28.756	− 0.534	− 4.198	6 18 24.024	. . . .	. . .	. .	. . . .	. .
S Monoc. . . .	35 28.821	− 0.558	.201	6 35 24.062	. . . .	. . .	. .	. . . .	. .
18 Monoc. . .	42 39.620	− 0.524	.202	6 42 34.894	. . . .	. . .	. .	. . . .	. .
51 H. Ceph. . .	53 30.36	− 6.60	.20	6 53 19.56	265 6 1.74	− 59.23	46.82	87 12 44.31	25.49
λ Urs. Min. l. c. .	7 22 57.91	+ 16.45	.21	19 23 10.15	261 17 44.55	− 67.98	46.82	88 58 49.75	25.12
25 Monoc. . .	32 19.620	− 0.496	.210	7 32 14.914	. . . .	. . .	. .	. . . .	. .
g	57 50.47	− 16.01	.21	7 57 30.25	263 22 23.87	− 63.09	46.82	88 56 26.04	. .
p l. c. . . .	8 14 1.01	+ 2.18	.22	20 13 58.97	256 41 17.50	− 80.83	46.82	84 22 9.85	. .
Br. 1197 . . .	20 41.127	− 0.498	.218	8 20 36.411	. . . .	. . .	. .	. . . .	. .
h	54 34.25	− 3.14	.22	8 54 26.89	267 43 15.14	− 54.16	46.82	84 35 25.84	. .
9 Hydrae . . .	9 9 10.913	− 0.526	.227	9 9 6.160	. . . .	. . .	. .	. . . .	. .
1 H. Draco. . .	22 54.16	− 2.17	.23	9 22 47.76	270 32 2.37	− 49.21	46.82	81 46 33.66	25.86
π Leon. . . .	54 56.957	− 0.552	.234	9 54 52.171	. . . .	. . .	. .	. . . .	. .
α Leon. . . .	10 3 4.086	− 0.569	.236	10 2 59.281	. . . .	. . .	. .	. . . .	. .
r l. c. . . .	21 6.95	+ 2.24	.24	22 21 4.95	257 54 53.72	− 77.59	46.82	85 35 49.31	. .

c s.000 c' −s.017 ΔT − 4s.216 Nadir 134° 57′ 21″.33 t 47.4

b − .548 at 8h 4m Equator 352 17 46 .82 B 25.76

a − .096 at 7h.9 Rate −s.03 Rate −s.010 T 51

FEBRUARY 18, 1898. CIR. W, WT. 4, OBSR. T.

Star.	Transit.	Corr.	ΔT	App. R. A.	Circle.	Refr.	Eq.	App. Decl.	φ
	h m s	s	s	h m s	° ′ ″	″	″	° ′ ″	″
8 Monoc. . . .	6 18 28.854	− 0.526	− 4.280	6 18 24.048	. . . .	. . .	. .	. . . .	. .
S Monoc. . . .	35 28.875	− 0.546	.281	6 35 24.048	. . . .	. . .	. .	. . . .	. .
18 Monoc. . .	42 39.614	− 0.518	.281	6 42 34.815	. . . .	. . .	. .	. . . .	. .
51 H. Ceph. . .	53 28.17	− 5.10	.28	6 53 18.79	265 6 5.58	− 61.12	49.46	87 12 45.00	25.41
λ Urs. Min. l. c. .	7 23 2.23	+ 12.95	.28	19 23 10.90	261 17 48.44	− 70.12	49.46	88 58 48.86	24.90
25 Monoc. . .	32 19.624	− 0.495	.282	7 32 14.847	. . . .	. . .	. .	. . . .	. .
g	57 48.00	− 13.42	.28	7 57 30.30	263 22 28.25	− 65.08	49.46	88 56 26.29	. .
p l. c. . . .	8 14 1.25	+ 1.77	.28	20 13 58.74	256 41 22.07	− 83.37	49.46	84 22 9.24	. .
Br. 1197 . . .	20 41.154	− 0.496	.282	8 20 36.376	. . . .	. . .	. .	. . . .	. .
h	54 34.51	− 2.85	.28	8 54 27.38	267 43 18.72	− 55.81	49.46	84 35 26.55	. .
9 Hydrae . . .	9 9 10.984	− 0.518	.283	9 9 6.183	. . . .	. . .	. .	. . . .	. .
1 H. Draco. . .	22 54.27	− 2.03	.28	9 22 47.96	270 32 5.26	− 50.58	49.46	81 46 34.78	25.48
π Leon. . . .	54 57.065	− 0.539	.284	9 54 52.242	. . . .	. . .	. .	. . . .	. .
α Leon. . . .	10 3 4.146	− 0.554	.284	10 2 59.308	. . . .	. . .	. .	. . . .	. .
r l. c. . . .	21 6.00	+ 2.41	.28	22 21 4.13	257 54 57.74	− 79.45	49.46	85 35 48.83	. .

c s.000 c' −s.017 ΔT − 4s.282 Nadir 134° 57′ 24″.09 t 34.2

b − .515 at 8h 4m Equator 352 17 49 .46 B 25.80

a − .134 Rate −s.001 T 36

MARCH 1, 1898. CIR. W, WT. 3, OBSR. T.

Star.	Transit.	Corr.	ΔT	App. R. A.	Circle.	Refr.	Eq.	App. Decl.	φ
	h m s	s	s	h m s	° ′ ″	″	″	° ′ ″	″
76 Draco. l. c.	8 49 49.89	+ 2.34	− 5.10	20 49 47.13	254 28 22.69	− 88.20	47.42	82 9 7.07	26.20
♑ Hydrae	9 9 11.699	− 0.482	.104	9 9 6.113	. . . .	. . .	. .	. . . .	. .
q l. c.	19 27.10	+ 6.04	.10	21 19 28.04	258 55 53.12	− 74.14	47.42	86 36 51.16	. .
π Leon.	54 57.942	− 0.519	.104	9 54 52.319	. . . .	. . .	. .	. . . .	. .
α Leon.	10 3 4.993	− 0.545	.104	10 2 59.344	. . . .	. . .	. .	. . . .	. .
30 H. Cam.	19 4.50	− 3.61	.10	10 18 55.79	269 14 5.74	− 51.29	47.42	83 4 32.97	25.83
1 Leon.	44 2.251	− 0.536	.104	10 43 56.611	. . . .	. . .	. .	. . . .	. .
s l. c.	55 0.87	+ 3.08	.10	22 54 58.85	256 7 20.22	− 82.58	47.42	83 48 10.22	. .
i	11 2 51.81	− 6.23	.10	11 2 40.48	266 7 18.92	− 57.20	47.42	86 11 25.70	. .
σ Leon.	16 1.035	− 0.507	.104	11 15 55.424	. . . .	. . .	. .	. . . .	. .
t l. c.	27 20.98	+ 6.30	.10	23 27 22.18	259 3 55.22	− 73.71	47.42	86 44 54.09	. .
β Virg.	45 31.263	− 0.479	.104	11 45 25.680	. . . .	. . .	. .	. . . .	. .
u l. c.	51 32.68	+ 2.51	.10	23 51 30.09	254 56 51.28	− 86.36	47.42	82 37 37.50	. .
o Virg.	12 0 9.221	− 0.524	.104	12 0 3.593	. . . .	. . .	. .	. . . .	. .
k	15 28.97	− 13.10	.10	12 15 10.77	264 3 11.90	− 61.42	47.42	88 15 36.94	. .
1 prec.	48 37.16	− 4.08	.10	12 48 27.98	268 20 41.31	− 52.80	47.42	83 57 58.91	. .
43 H. Ceph. l. c.	54 33.01	+ 4.68	.10	0 54 32.59	258 1 59.34	− 76.51	47.42	85 42 55.41	25.19

c s.000 *c′* − s.017 ΔT − 5s.104 Nadir 134° 57′ 21″.70 *l* 50.4

b − .579 at 10h 42m Equator 352 17 47 .42 B 25.85

a + .020 Rate .000 T 50

MARCH 3, 1898. CIR. W, WT. 4, OBSR. T.

Star.	Transit.	Corr.	ΔT	App. R. A.	Circle.	Refr.	Eq.	App. Decl.	φ
	h m s	s	s	h m s	° ′ ″	″	″	° ′ ″	″
76 Draco. l. c.	8 49 50.43	+ 2.15	− 5.23	20 49 47.35	254 28 22.02	− 88.10	47.69	82 9 6.23	25.95
♑ Hydrae	9 9 11.799	− 0.455	.226	9 9 6.118	. . . .	. . .	. .	. . . .	. .
q l. c.	19 27.92	+ 5.57	.23	21 19 28.26	258 55 52.87	− 74.15	47.69	86 36 51.03	. .
6 Sex.	46 13.999	− 0.416	.228	9 46 8.355	. . . .	. . .	. .	. . . .	. .
π Leon.	54 57.985	− 0.490	.229	9 54 52.266	. . . .	. . .	. .	. . . .	. .
α Leon.	10 3 5.065	− 0.514	.229	10 2 59.322	. . . .	. . .	. .	. . . .	. .
30 H. Cam.	19 4.34	− 3.34	.23	10 18 55.77	269 14 5.51	− 51.35	47.69	83 4 33.53	25.86
1 Leon.	44 2.408	− 0.506	.231	10 43 56.671	. . . .	. . .	. .	. . . .	. .
s l. c.	55 1.42	+ 2.84	.23	22 54 59.03	256 7 20.24	− 82.63	47.69	83 48 9.92	. .
i	11 2 51.90	− 5.76	.23	11 2 40.91	266 7 18.08	− 57.24	47.69	86 11 26.85	.
σ Leon.	16 1.185	− 0.478	.233	11 15 55.474	. . . .	. . .	. .	. . . .	. .
t l. c.	27 21.82	+ 5.80	.23	23 27 22.39	259 3 54.56	− 73.84	47.69	86 44 53.03	. .
β Virg.	45 31.391	− 0.452	.234	11 45 25.705	. . . .	. . .	. .	. . . .	. .
u l. c.	51 32.57	+ 2.31	.23	23 51 29.65	254 56 51.65	− 86.56	47.69	82 37 37.40	. .
o Virg.	12 0 9.371	− 0.494	.235	12 0 3.642	. . . .	. . .	. .	. . . .	. .
k	15 31.34	− 12.10	.24	12 15 14.00	264 3 11.36	− 61.57	47.69	88 15 37.90	. .
1 prec.	48 37.17	− 3.78	.24	12 48 28.15	268 20 41.04	− 52.95	47.69	83 57 59.60	. .
43 H. Ceph. l. c.	54 33.12	+ 4.31	.24	0 54 32.19	258 1 59.61	− 76.73	47.69	85 42 55.19	25.45

c + s.006 *c′* − s.011 ΔT − 5s.231 Nadir 134° 57′ 21″.97 *l* 48.2

b − .548 at 10h 35m Equator 352 17 47 .69 B 25.77

a + .014 Rate − s.003 T 50

MARCH 4, 1898. CIR. W, WT. 4, OBSR. T.

Star.	Transit.	Corr.	ΔT	App. R. A.	Circle.	Refr.	Eq.	App. Decl.	φ
	h m s	s	s	h m s	° ′ ″	″	″	° ′ ″	″
76 Draco. l. c.	8 49 50.43	+ 2.03	− 5.19	20 49 47.27	254 28 21.27	− 87.74	47.62	82 9 5.91	25.99
9 Hydrae	9 9 11.827	− 0.488	.187	9 9 6.152	. . . .	. . .	. .	. . . .	. .
q l. c.	19 28.48	+ 5.25	.19	21 19 28.54	258 55 52.42	− 73.82	47.72	86 36 50.88	. .
6 Sex.	46 13.963	− 0.453	.185	9 46 8.325	. . . .	. . .	. .	. . . .	. .
π Leon.	54 58.028	− 0.521	.185	9 54 52.322	. . . .	. . .	. .	. . . .	. .
α Leon.	10 3 5.036	− 0.543	.185	10 2 59.308	. . . .	. . .	. .	. . . .	. .
30 H. Cam.	19 4.16	− 3.18	.18	10 18 55.80	269 14 5.05	− 51.12	47.91	83 4 33.98	25.74
1 Leon.	44 2.401	− 0.535	.184	10 43 56.682	. . . .	. . .	. .	. . . .	. .
s l. c.	55 1.26	+ 2.53	.18	22 54 58.61	256 7 19.56	− 82.31	48.03	83 48 9.22	. .
i	11 2 51.87	− 5.34	.18	11 2 41.35	266 7 18.24	− 57.04	48.06	86 11 26.86	. .
σ Leon.	16 1.114	− 0.509	.182	11 15 55.423	. . . .	. . .	. .	. . . .	. .
t l. c.	27 21.56	+ 5.18	.18	23 27 21.56	259 3 54.51	− 73.59	48.14	86 44 52.78	. .
β Virg.	45 31.413	− 0.486	.181	11 45 25.746	. . . .	. . .	. .	. . . .	. .
u l. c.	51 32.75	+ 1.99	.18	23 51 29.56	254 56 50.83	− 86.30	48.22	82 37 36.31	. .
o Virg.	12 0 9.321	− 0.525	.181	12 0 3.615	. . . .	. . .	. .	. . . .	. .
k	15 28.18	− 10.83	.18	12 15 12.17	264 3 11.87	− 61.40	48.30	88 15 37.83	. .
1 prec.	48 36.84	− 3.41	.18	12 48 28.25	268 20 40.72	− 52.81	48.41	83 58 0.50	. .
43 H. Ceph. l. c.	54 33.55	+ 3.66	.18	0 54 32.03	258 2 0.13	− 76.54	48.43	85 42 55.16	25.71

c +s.003 c' −s.014 ΔT −5s.184 Nadir 134° 57′ 22″.26 at 10h.8 t 50.0

b − .557 at 10h 35m Equator 352 17 47 .99 at 10 .7 B 25.77

a − .031 at 10h.6 Rate −s.01 Rate +s.002 Rates +0″.20 T 51

MARCH 11, 1898. CIR. W, WT. 3, OBSR. T.

Star.	Transit.	Corr.	ΔT	App. R. A.	Circle.	Refr.	Eq.	App. Decl.	φ
	h m s	s	s	h m s	° ′ ″	″	″	° ′ ″	″
76 Draco. l. c.	8 49 50.59	+ 2.03	− 4.62	20 49 48.00	254 28 19.36	− 87.89	47.61	82 9 3.86	25.56
9 Hydrae	9 9 11.241	− 0.501	.623	9 9 6.117	. . . .	. . .	. .	. . . .	. .
q l. c.	19 29.10	+ 5.42	.62	21 19 29.90	258 55 49.97	− 73.92	47.61	86 36 48.44	. .
6 Sex.	46 13.391	− 0.462	.621	9 46 8.308	. . . .	. . .	. .	. . . .	. .
π Leon.	54 57.435	− 0.536	.620	9 54 52.279	. . . .	. . .	. .	. . . .	. .
α Leon.	10 3 4.493	− 0.561	.620	10 2 59.312	. . . .	. . .	. .	. . . .	. .
30 H. Cam.	19 3.46	− 3.41	.62	10 18 55.43	269 14 2.50	− 51.15	47.61	83 4 36.26	25.56
1 Leon	44 1.886	− 0.553	.618	10 43 56.715	. . . .	. . .	. .	. . . .	. .
s l. c.	55 0.69	+ 2.86	.62	22 54 58.93	256 7 16.48	− 82.28	47.61	83 48 6.19	. .
i	11 2 51.40	− 5.92	.62	11 2 40.86	266 7 15.58	− 56.97	47.61	86 11 29.00	. .
σ Leon.	16 0.642	− 0.525	.616	11 15 55.501	. . . .	. . .	. .	. . . .	. .
t l. c.	27 20.83	+ 5.97	.62	23 27 22.18	259 3 51.97	− 73.44	47.61	86 44 50.92	. .
β Virg.	45 30.870	− 0.499	.615	11 45 25.756	. . . .	. . .	. .	. . . .	. .
u l. c.	51 31.79	+ 2.39	.61	23 51 29.57	254 56 48.34	− 86.06	47.61	82 37 34.67	. .
o Virg.	12 0 8.871	− 0.541	.614	12 0 3.716	. . . .	. . .	. .	. . . .	. .
k	15 29.02	− 12.73	.61	12 15 11.68	264 3 8.66	− 61.21	47.61	88 15 40.16	. .
1 prec.	48 37.20	− 4.02	.61	12 48 28.57	268 20 38.24	− 52.62	47.61	83 58 1.99	. .
43 H. Ceph. l. c.	54 31.47	+ 4.59	.61	0 54 31.45	258 1 57.07	− 76.28	47.61	85 42 53.19	25.42

c +s.006 c' −s.011 ΔT −4s.618 Nadir 134° 57′ 22″.01 t 50.7

b − .586 at 10h 35m Equator 352 17 47 .61 B 25.78

a − .009 at 10h.6 Rate +s.01 Rate +s.003 T 50

MARCH 22, 1898. CIR. E, WT. 2, OBSR. T.

Star.	Transit.	Corr.	ΔT	App. R. A.	Circle.	Refr.	Eq.	App. Decl.	φ
	h m s	s	s	h m s	° ′ ″	″	″	° ′ ″	″
76 Draco. l. c.	8 49 52.92	+ 1.63	− 5.26	20 49 49.29	375 25 32.11	+ 91.44	4.86	82 9 1.31	[24.46]
9 Hydrae . . .	9 9 11.781	− 0.551	.262	9 9 5.968	. . . .	. . .	. .	. . . .	. .
q l. c. . . .	19 34.05	+ 4.56	.26	21 19 33.35	370 58 2.29	+ 76.97	4.86	86 36 45.60	. .
6 Sex.	46 14.067	− 0.513	.265	9 46 8.289	. . . .	. . .	. .	. . . .	. .
π Leon. . . .	54 58.087	− 0.575	.266	9 54 52.246	. . . .	. . .	. .	. . . .	. .
α Leon. . . .	10 3 5.136	− 0.597	.266	10 2 59.273	. . . .	. . .	. .	. . . .	. .
30 H. Cam. . .	19 3.01	− 3.06	.27	10 18 54.68	360 39 49.61	+ 53.20	3.68	83 4 39.13	25.92
l Leon. . . .	44 2.551	− 0.585	.270	10 43 56.696	. . . .	. . .	. .	. . . .	. .
S l. c. . . .	55 2.57	+ 2.38	.27	22 54 59.68	373 46 34.61	+ 85.61	3.68	83 48 3.46	. .
i	11 2 50.15	− 5.27	.27	11 2 39.61	363 46 36.73	+ 59.30	3.68	86 11 32.35	. .
σ Leon. . . .	16 1.394	− 0.560	.272	11 15 55.562	. . . .	. . .	. .	. . . .	. .
t l. c. . . .	27 23.26	+ 5.08	.28	23 27 23.06	370 50 0.08	+ 76.46	3.68	86 44 47.14	. .
β Virg. . . .	45 31.653	− 0.532	.275	11 45 25.846	. . . .	. . .	. .	. . . .	. .
u l. c. . . .	51 33.14	+ 1.99	.28	23 51 29.85	374 57 2.58	+ 89.61	3.68	82 37 31.49	. .
o Virg. . . .	12 0 9.594	− 0.565	.276	12 0 3.753	. . . .	. . .	. .	. . . .	. .
k	15 28.15	− 11.21	.28	12 15 11.66	365 50 43.96	+ 63.73	3.68	88 15 44.01	. .
l prec. . . .	48 37.75	− 3.61	.28	12 48 28.86	361 33 13.52	+ 54.82	3.68	83 58 4.66	. .
43 H. Ceph. l. c. .	54 31.77	+ 3.91	.28	0 54 30.40	371 51 54.78	+ 79.45	3.68	85 42 49.45	25.36

c +s.006 c' −s.011 ΔT −5s.269 Nadir 134° 56′ 29″.45 ℓ 34.1

b − .593 at 10h 35m Equator 277 36 4 .86 to 9h.4 B 25.91

a − .074 at 10h.7 Rate +s.01 Rate −s.005 277 36 3 .68 after 9h.4 T 33

MARCH 23, 1898. CIR. E, WT. 4, OBSR. T.

Star.	Transit.	Corr.	ΔT	App. R. A.	Circle.	Refr.	Eq.	App. Decl.	φ
	h m s	s	s	h m s	° ′ ″	″	″	° ′ ″	″
76 Draco. l. c.	8 49 52.49	+ 2.38	− 5.41	20 49 49.46	375 25 31.30	+ 90.34	2.90	82 9 1.26	25.88
9 Hydrae . . .	9 9 11.838	− 0.438	.413	9 9 5.987	. . . .	. . .	. .	. . . .	. .
q l. c. . . .	19 31.99	+ 6.07	.41	21 19 32.65	370 58 1.04	+ 75.96	2.90	86 36 45.90	. .
6 Sex.	46 14.117	− 0.395	.417	9 46 8.305	. . . .	. . .	. .	. . . .	. .
π Leon. . . .	54 58.066	− 0.476	.417	9 54 52.173	. . . .	. . .	. .	. . . .	. .
α Leon. . . .	10 3 5.229	− 0.502	.418	10 2 59.309	. . . .	. . .	. .	. . . .	. .
30 H. Cam. . .	19 3.83	− 3.58	.42	10 18 54.83	360 39 50.02	+ 52.54	2.90	83 4 39.66	25.80
l Leon. . . .	44 2.565	− 0.493	.422	10 43 56.650	. . . .	. . .	. .	. . . .	. .
s l. c. . . .	55 1.98	+ 3.12	.42	22 54 59.68	373 46 35.25	+ 84.55	2.90	83 48 3.10	. .
i	11 2 51.92	− 6.18	.42	11 2 40.32	363 46 37.11	+ 58.57	2.90	86 11 32.78	. .
σ Leon. . . .	16 1.416	− 0.462	.426	11 15 55.528	. . . .	. . .	. .	. . . .	. .
t l. c. . . .	27 21.07	+ 6.34	.43	23 27 21.98	370 50 0.91	+ 75.54	2.90	86 44 46.45	. .
β Virg. . . .	45 31.681	− 0.435	.428	11 45 25.818	. . . .	. . .	. .	. . . .	. .
u l. c. . . .	51 32.30	+ 2.55	.43	23 51 29.42	374 57 3.20	+ 88.56	2.90	82 37 31.14	. .
o Virg. . . .	12 0 9.716	− 0.480	.430	12 0 3.806	. . . .	. . .	. .	. . . .	. .
k	15 31.82	− 13.06	.43	12 15 13.33	365 50 44.16	+ 62.99	2.90	88 15 44.25	. .
l prec.	48 38.94	− 4.09	.43	12 48 29.42	361 33 14.76	+ 54.16	2.90	83 58 6.02	. .
43 H. Ceph. l. c. .	54 31.13	+ 4.72	.43	0 54 30.42	371 51 54.83	+ 78.49	2.90	85 42 49.58	25.95

c +s.006 c' −s.011 ΔT −5s.422 Nadir 134° 56′ 28″.79 ℓ 38.1

b − .552 at 10h 35m Equator 277 36 2 .90 B 25.83

a + .048 Rate −s.006 T 40

MARCH 30, 1898. CIR. W, WT. 3, OBSR. T.

Star.	Transit.	Corr.	ΔT	App. R. A.	Circle.	Refr.	Eq.	App. Decl.	φ
	h m s	s	s	h m s	° ′ ″	″	″	° ′ ″	″
76 Draco. l. c.	8 49 55.01	+ 1.84	− 6.55	20 49 50.30	375 25 34.80	+ 88.54	3.47	82 9 0.13	25.71
9 Hydrae	9 9 12.995	− 0.474	.556	9 9 5.965	. . . .	. . .	. .	. . . .	. .
q l. c.	19 36.27	+ 4.80	.56	21 19 34.51	370 58 4.17	+ 74.48	3.47	86 36 44.82	. .
6 Sex.	46 15.160	− 0.440	.560	9 46 8.160	. . . .	. . .	. .	. . . .	. .
π Leon.	54 59.209	− 0.503	.561	9 54 52.145	. . . .	. . .	. .	. . . .	. .
α Leon.	10 3 6.315	− 0.524	.561	10 2 59.230	. . . .	. . .	. .	. . . .	. .
30 H. Cam.	19 3.61	− 2.94	.56	10 18 54.11	360 39 52.83	+ 51.51	3.47	83 4 40.87	26.24
l Leon.	44 3.743	− 0.517	.565	10 43 56.661	. . . .	. . .	. .	. . . .	. .
s l. c.	55 4.86	+ 2.29	.57	22 55 0.58	373 46 39.61	+ 82.86	3.47	83 48 1.00	. .
i	11 2 50.63	− 4.92	.57	11 2 39.14	363 46 40.49	+ 57.40	3.47	86 11 34.42	. .
σ Leon.	16 2.594	− 0.494	.569	11 15 55.531	. . . .	. . .	. .	. . . .	. .
t l. c.	27 24.88	+ 4.70	.57	23 27 23.01	370 50 4.81	+ 74.02	3.47	86 44 44.64	. .
β Virg.	45 32.910	− 0.472	.572	11 45 25.866	. . . .	. . .	. .	. . . .	. .
u l. c.	51 34.74	+ 1.79	.57	23 51 29.96	374 57 7.29	+ 86.78	3.47	82 37 29.40	. .
o Virg.	12 0 10.880	− 0.507	.573	12 0 3.800	. . . .	. . .	. .	. . . .	. .
k	15 29.12	− 9.89	.57	12 15 12.66	365 50 48.09	+ 61.74	3.47	88 15 46.36	. .
l prec.	48 39.16	− 3.13	.58	12 48 29.45	361 33 18.14	+ 53.12	3.47	83 58 7.79	. .
43 H. Ceph. l. c.	54 33.72	+ 3.30	.58	0 54 30.44	371 51 59.48	+ 76.98	3.47	85 42 47.01	25.45

c +s.006 c' −s.011 ΔT −6s.565 Nadir 134° 56′ 29″.32 t 47.9

b − .534 at 10h 35m Equator 277 36 3 .47 B 25.84

a − .045 at 10h.7 Rate −s.01 Rate −s.006 T 49

MARCH 31, 1898. CIR. E, WT. 4, OBSR. T.

Star.	Transit.	Corr.	ΔT	App. R. A.	Circle.	Refr.	Eq.	App. Decl.	φ
	h m s	s	s	h m s	° ′ ″	″	″	° ′ ″	″
76 Draco. l. c.	8 49 55.49	+ 1.58	− 6.71	20 49 50.36	375 25 34.12	+ 88.53	3.20	82 9 0.55	26.53
9 Hydrae	9 9 13.110	− 0.496	.711	9 9 5.903	. . . .	. . .	. .	. . . .	. .
q l. c.	19 36.87	+ 4.17	.71	21 19 34.33	370 58 4.86	+ 74.53	3.20	86 36 43.81	. .
6 Sex.	46 15.360	− 0.474	.715	9 46 8.171	. . . .	. . .	. .	. . . .	. .
π Leon.	54 59.359	− 0.531	.715	9 54 52.113	. . . .	. . .	. .	. . . .	. .
α Leon.	10 3 6.429	− 0.549	.716	10 2 59.164	. . . .	. . .	. .	. . . .	. .
30 H. Cam.	19 3.27	− 2.62	.72	10 18 53.93	360 39 52.96	+ 51.63	3.20	83 4 41.39	26.21
S l. c.	55 5.60	+ 1.80	.72	22 55 0.68	373 46 39.37	+ 83.10	3.20	83 48 0.73	. .
i	11 2 49.95	− 4.21	.72	11 2 39.02	363 46 40.80	+ 57.57	3.20	86 11 35.17	. .
t l. c.	27 25.94	+ 3.72	.73	23 27 22.93	370 50 4.45	+ 74.25	3.20	86 44 44.50	. .
β Virg.	45 33.095	− 0.524	.727	11 45 25.844	. . . .	. . .	. .	. . . .	. .
u l. c.	51 35.34	+ 1.30	.73	23 51 29.91	374 57 7.39	+ 87.07	3.20	82 37 28.74	. .
o Virg.	12 0 11.109	− 0.554	.728	12 0 3.827	. . . .	. . .	. .	. . . .	. .
k	15 27.95	− 8.00	.73	12 15 13.22	365 50 47.84	+ 61.96	3.20	88 15 46.60	. .
l prec.	48 38.93	− 2.58	.73	12 48 29.62	361 33 18.32	+ 53.31	3.20	83 58 8.43	. .
43 H. Ceph. l. c.	54 34.81	+ 2.39	.74	0 54 30.46	371 51 58.85	+ 77.26	3.20	85 42 47.09	26.06

c +s.003 c' −s.014 ΔT −6s.720 Nadir 134° 56′ 29″.29 t 47.1

b − .533 at 10h 26m Equator 277 36 3 .20 B 25.86

a − .107 at 10h.7 Rate −s.02 Rate −s.006 T 48

APRIL 20, 1898. CIR. E, WT. 3, OBSR. T.

Star.	Transit.	Corr.	ΔT	App. R. A.	Circle.	Refr.	Eq.	App. Decl.	φ
	h m s	s	s	h m s	° ′ ″	″	″	° ′ ″	″
1 fol.	12 48 44.72	− 1.68	− 6.68	12 48 36.36	361 33 7.46	+ 54.08	6.00	83 57 55.54	. .
ε Virg.	57 16.297	− 0.597	.683	12 57 9.017	. . . .	. . .	. .	. . . .	. .
α Urs. Min. l. c. .	13 20 50.63	+ 5.00	.68	1 20 48.95	368 48 58.96	+ 69.95	5.89	88 45 56.98	25.66
ζ Virg.	29 40.020	− 0.570	.680	13 29 32.770	. . . .	. . .	. .	. . . .	. .
m	45 33.88	− 1.62	.68	13 45 25.58	360 50 53.65	+ 52.69	5.81	83 15 40.53	. .
a l. c.	14 1 6.84	+ 0.45	.68	2 1 0.61	374 29 33.53	+ 86.61	5.76	83 5 5.62	. .
ι Virg.	10 50.220	− 0.556	.678	14 10 42.986	. . . .	. . .	. .	. . . .	. .
μ Virg.	37 51.398	− 0.558	.676	14 37 44.164	. . . .	. . .	. .	. . . .	. .
109 Virg. . . .	41 15.813	− 0.576	.676	14 41 8.561	. . . .	. . .	. .	. . . .	. .
P 221	51 34.682	− 0.606	.675	14 51 27.401	. . . .	. . .	. .	. . . .	. .
b l. c.	15 8 6.85	+ 0.84	.67	3 8 1.02	373 1 29.87	+ 81.61	5.53	84 33 14.05	. .
c l. c.	33 10.45	+ 1.57	.67	3 33 5.35	371 14 59.82	+ 76.24	5.45	86 19 49.39	. .
ε Serp.	45 54.070	− 0.581	.671	15 45 46.818	. . . .	. . .	. .	. . . .	. .
o	54 15.65	− 1.75	.67	15 54 7.23	360 50 13.33	+ 52.47	5.38	83 15 0.42	. .
Gr. 750 l. c. . .	16 4 30.77	+ 1.15	.67	4 4 25.25	372 17 19.73	+ 79.23	5.35	85 17 26.39	25.53
ζ Oph.	31 42.726	− 0.545	.668	16 31 35.513	. . . .	. . .	. .	. . . .	. .
ε Urs. Min. . .	56 37.09	− 1.65	.67	16 56 28.77	359 47 12.77	+ 50.56	5.17	82 11 58.16	26.03

c +ˢ.016 c' −ˢ.001 ΔT − 6ˢ.676 Nadir 134° 56′ 31″.33 at 14ʰ.8 t 39.9
b − .536 at 14ʰ 38ᵐ Equator 277 36 5 .48 at 15 .4 B 25.78
a − .235 at 15ʰ.8 Rate +ˢ.01 Rate +ˢ.004 Rates − 0″.2 T 41

APRIL 22, 1898. CIR. E, WT. 3, OBSR. T.

Star.	Transit.	Corr.	ΔT	App. R. A.	Circle.	Refr.	Eq.	App. Decl.	φ
	h m s	s	s	h m s	° ′ ″	″	″	° ′ ″	″
1 fol.	12 48 45.40	− 2.91	− 6.46	12 48 36.03	361 33 7.38	+ 52.88	3.31	83 57 56.95	. .
ε Virg.	57 16.005	− 0.554	.456	12 57 8.995	. . . .	. . .	. .	. . . .	. .
α Urs. Min. l. c. .	13 20 45.53	+ 11.33	.45	1 20 50.41	368 48 58.70	+ 68.47	3.31	88 45 56.14	25.29
ζ Virg.	29 39.741	− 0.503	.454	13 29 32.784	. . . .	. . .	. .	. . . .	. .
m	45 34.87	− 2.65	.45	13 45 25.77	360 50 52.93	+ 51.63	3.31	83 15 41.25	. .
a l. c.	14 1 5.30	+ 1.60	.45	2 1 0.45	374 29 34.27	+ 84.83	3.31	83 5 4.21	. .
ι Virg.	10 49.956	− 0.478	.450	14 10 43.028	. . . .	. . .	. .	. . . .	. .
μ Virg.	37 51.077	− 0.480	.448	14 37 44.149	. . . .	. . .	. .	. . . .	. .
109 Virg. . . .	41 15.563	− 0.514	.448	14 41 8.601	. . . .	. . .	. .	. . . .	. .
P 221	51 34.404	− 0.570	.447	14 51 27.387	. . . .	. . .	. .	. . . .	. .
b l. c.	15 8 5.28	+ 2.17	.45	3 8 1.00	373 1 30.23	+ 79.89	3.31	84 33 13.19	. .
c l. c.	33 8.25	+ 3.46	.44	3 33 5.27	371 15 0.03	+ 74.64	3.31	86 19 48.64	. .
ε Serp.	45 53.863	− 0.525	.442	15 45 46.896	. . . .	. . .	. .	. . . .	. .
o	54 16.48	− 2.64	.44	15 54 7.40	360 50 13.01	+ 51.39	3.31	83 15 1.09	. .
Gr. 750 l. c. . .	16 4 29.68	+ 2.59	.44	4 4 25.83	372 17 20.08	+ 77.59	3.31	85 17 25.64	25.28
ζ Oph.	31 42.433	− 0.458	.438	16 31 35.537	. . . .	. . .	. .	. . . .	. .
ε Urs. Min. . .	56 38.04	− 2.36	.44	16 56 29.24	359 47 12.58	+ 49.49	3.31	82 11 58.76	25.88

c +ˢ.013 c' −ˢ.004 ΔT − 6ˢ.448 Nadir 134° 56′ 28″.91 t 53.7
b − .550 at 14ʰ 38ᵐ Equator 277 36 3 .31 B 25.98
a − .104 Rate +ˢ.005 T 54

APRIL 26, 1898. CIR. E, WT. 4, OBSR. T.

Star.	Transit.	Corr.	ΔT	App. R. A.	Circle.	Refr.	Eq.	App. Decl.	φ
	h m s	s	s	h m s	° ′ ″	″	″	° ′ ″	″
l fol.	12 48 43.19	− 1.57	− 5.77	12 48 35.85	361 33 9.05	+ 52.16	3.70	83 57 57.51	. .
ε Virg.	57 15.447	− 0.620	.770	12 57 9.057	. . .	. . .	. .	. . . .	. .
α Urs. Min. l. c.	13 20 52.99	+ 4.21	.76	1 20 51.44	368 49 0.71	+ 67.49	3.70	88 45 55.50	25.77
ζ Virg.	29 39.220	− 0.600	.767	13 29 32.853	. . . .	. . .	. .	. . . .	. .
m	45 32.76	− 1.47	.76	13 45 25.53	360 50 55.02	+ 50.89	3.70	83 15 42.21	. .
a l. c.	14 1 6.16	+ 0.26	.76	2 1 0.66	374 29 35.92	+ 83.73	3.70	83 5 4.05	. .
ι Virg.	10 49.463	− 0.591	.762	14 10 43.110	. . . .	. . .	. .	. . . .	. .
μ Virg.	37 50.577	− 0.591	.759	14 37 44.227	. . . .	. . .	. .	. . . .	. .
109 Virg.	41 14.963	− 0.605	.758	14 41 8.600	. . . .	. . .	. .	. . . .	. .
P 221	51 33.761	− 0.626	.757	14 51 27.378	. . . .	. . .	. .	. . . .	. .
b l. c.	15 8 6.32	+ 0.49	.75	3 8 1.06	373 1 31.75	+ 79.12	3.70	84 33 12.83	. .
c l. c.	33 10.22	+ 1.02	.75	3 33 5.49	371 15 1.98	+ 73.93	3.70	86 19 47.79	. .
ε Serp.	45 53.248	− 0.609	.751	15 45 46.888	. . . .	. . .	. .	. . . .	. .
o	54 14.62	− 1.47	.75	15 54 7.40	360 50 15.31	+ 50.94	3.70	83 15 2.55	. .
Gr. 750 l. c.	16 4 30.58	+ 0.67	.75	4 4 25.50	372 17 22.01	+ 76.94	3.70	85 17 24.75	25.55
ζ Oph.	31 41.940	− 0.583	.746	16 31 35.611	. . . .	. . .	. .	. . . .	. .
ε Urs. Min.	56 36.30	− 1.35	.74	16 56 29.21	359 47 15.00	+ 49.17	3.70	82 12 0.47	25.38

c +s.010 c' −s.007 ΔT −5s.759 Nadir 134° 56′ 29″.35 t 59.2
b − .530 at 14h 38m Equator 277 36 3 .70 B 25.99
a − .283 Rate +s.007 T 59

MAY 2, 1898. CIR. E, WT. 4, OBSR. T.

Star.	Transit.	Corr.	ΔT	App. R. A.	Circle.	Refr.	Eq.	App. Decl.	φ
	h m s	s	s	h m s	° ′ ″	″	″	° ′ ″	″
l fol.	12 48 43.94	− 3.10	− 5.49	12 48 35.35	361 33 10.04	+ 52.93	+2.97	83 58 0.00	. .
ε Virg.	57 14.990	− 0.523	.491	12 57 8.976	. . . .	. . .	. .	. . . .	. .
α Urs. Min. l. c.	13 20 46.87	+12.55	.49	1 20 53.93	368 49 0.73	+ 68.46	2.97	88 45 53.78	26.01
ζ Virg.	29 38.763	− 0.471	.490	13 29 32.802	. . . .	. . .	. .	. . . .	. .
m	45 33.57	− 2.82	.49	13 45 25.26	360 50 55.72	+ 51.61	2.97	83 15 44.36	. .
a l. c.	14 1 4.55	+ 1.86	.49	2 1 0.92	374 29 36.17	+ 84.87	2.97	83 5 1.93	. .
ι Virg.	10 49.041	− 0.446	.489	14 10 43.106	. . . .	. . .	. .	. . . .	. .
μ Virg.	37 50.248	− 0.447	.488	14 37 44.313	. . . .	. . .	. .	. . . .	. .
109 Virg.	41 14.663	− 0.481	.488	14 41 8.694	. . . .	. . .	. .	. . . .	. .
P 221	51 33.504	− 0.538	.487	14 51 27.479	. . . .	. . .	. .	. . . .	. .
b l. c.	15 8 4.27	+ 2.49	.49	3 8 1.27	373 1 32.19	+ 80.06	2.97	84 33 10.72	. .
c l. c.	33 6.42	+ 3.92	.49	3 33 4.85	371 15 2.73	+ 74.71	2.97	86 19 45.53	. .
ε Serp.	45 52.963	− 0.492	.485	15 45 46.986	. . . .	. . .	. .	. . . .	. .
o	54 16.27	− 2.81	.49	15 54 7.97	360 50 15.61	+ 51.39	2.97	83 15 4.03	. .
Gr. 750 l. c.	16 4 27.73	+ 2.95	.48	4 4 25.20	372 17 22.22	+ 77.55	2.97	85 17 23.20	25.96
ζ Oph.	31 41.690	− 0.423	.484	16 31 35.783	. . . .	. . .	. .	. . . .	. .
ε Urs. Min.	56 37.92	− 2.49	.48	16 56 29.95	359 47 15.02	+ 49.37	2.97	82 12 1.43	26.30

c −s.006 c' −s.023 ΔT −5s.488 Nadir 134° 56′ 28″.88 t 49.8
b − .512 at 14h 38m Equator 277 36 2 .97 B 25.77
a − .067 Rate +s.002 T 49

MAY 3, 1898. CIR. W, WT. 2, OBSR. T.

Star.	Transit.	Corr.	ΔT	App. R. A.	Circle.	Refr.	Eq.	App. Decl.	φ
	h m s	s	s	h m s	° ′ ″	″	″	° ′ ″	″
1 fol.	12 48 44.20	− 3.84	− 5.58	12 48 34.78	268 20 39.81	− 52.65	46.84	83 57 59.68	. .
ε Virg.	57 15.067	− 0.526	.582	12 57 8.959	. . . .	. . .	. .	. . . .	. .
α Urs. Min. l. c. .	13 20 43.65	+16.17	.58	1 20 54.24	261 4 48.16	− 68.10	46.84	88 45 53.22	25.13
ζ Virg.	29 38.837	− 0.458	.584	13 29 32.795	. . . .	. . .	. .	. . . .	. .
m	45 34.19	− 3.43	.59	13 45 25.17	269 2 53.65	− 51.29	46.84	83 15 44.48	. .
a l. c. . . .	14 1 3.95	+ 2.46	.59	2 1 0.82	255 24 13.44	− 84.21	46.84	83 5 2.39	. .
ι Virg.	10 49.166	− 0.426	.587	14 10 43.153	. . . .	. . .	. .	. . . .	. .
μ Virg.	37 50.359	− 0.428	.588	14 37 44.343	. . . .	. . .	. .	. . . .	. .
109 Virg. . . .	41 14.752	− 0.472	.589	14 41 8.691	. . . .	. . .	. .	. . . .	. .
P 221	51 33.611	− 0.547	.589	14 51 27.475	. . . .	. . .	. .	. . . .	. .
b l. c. . . .	15 8 3.37	+ 3.17	.59	3 8 0.95	256 52 16.56	− 79.23	46.84	84 32 10.49	. .
c l. c. . . .	33 5.77	+ 4.85	.59	3 33 5.03	258 38 46.43	− 74.04	46.84	86 19 45.55	. .
ε Serp.	45 53.102	− 0.487	.593	15 45 47.022	. . . .	. . .	. .	. . . .	. .
o	54 16.69	− 3.29	.59	15 54 7.81	269 3 33.78	− 50.99	46.84	83 15 4.05	. .
Gr. 750 l. c. . .	16 4 27.06	+ 3.64	.59	4 4 25.11	257 36 26.50	− 77.00	46.84	85 17 22.66	25.15
ζ Oph.	31 41.760	− 0.397	.596	16 31 35.767	. . . .	. . .	. .	. . . .	. .
ε Urs. Min. . .	56 38.30	− 2.86	.60	16 56 29.84	270 6 34.11	− 49.17	46.84	82 12 1.90	25.53

c ˢ.000 c' −ˢ.017 ΔT −5ˢ.588 Nadir 134° 57′ 21″.54 ℓ 51.9

b − .553 at 14ʰ 38ᵐ Equator 352 17 46 .84 B 25.71

a − .012 at 15ʰ.2 Rate −ˢ.01 Rate −ˢ.004 T 51

MAY 4, 1898. CIR. W, WT. 3, OBSR. T.

Star.	Transit.	Corr.	ΔT	App. R. A.	Circle.	Refr.	Eq.	App. Decl.	φ
	h m s	s	s	h m s	° ′ ″	″	″	° ′ ″	″
1 fol.	12 48 43.88	− 3.45	− 5.55	12 48 34.88	268 20 40.34	− 53.25	47.09	83 58 0.00	. .
ε Virg.	57 15.103	− 0.570	.551	12 57 8.982	. . . .	. . .	. .	. . . .	. .
α Urs. Min. l. c. .	13 20 46.49	+13.87	.55	1 20 54.81	261 4 48.91	− 68.90	47.20	88 45 52.81	25.09
ζ Virg.	29 38.916	− 0.513	.551	13 29 32.852	. . . .	. . .	. .	. . . .	. .
m	45 33.58	− 3.07	.55	13 45 24.96	269 2 54.26	− 51.95	47.28	83 15 44.97	. .
a l. c. . . .	14 1 4.70	+ 2.02	.55	2 1 1.17	255 24 13.98	− 85.47	47.33	83 5 1.18	. .
μ Virg.	37 50.352	− 0.489	.549	14 37 44.314	. . . .	. . .	. .	. . . .	. .
109 Virg. . . .	41 14.787	− 0.526	.549	14 41 8.712	. . . .	. . .	. .	. . . .	. .
P 221	51 33.632	− 0.588	.549	14 51 27.495	. . . .	. . .	. .	. . . .	. .
b l. c. . . .	15 8 3.92	+ 2.61	.55	3 8 0.98	256 52 18.07	− 80.76	47.56	84 33 9.75	. .
c l. c. . . .	33 6.40	+ 4.04	.55	3 33 4.89	258 38 47.94	− 75.29	47.64	86 19 45.01	. .
ε Serp.	45 53.144	− 0.537	.548	15 45 47.059	. . . .	. . .	. .	. . . .	. .
o	54 16.18	− 2.95	.55	15 54 7.68	269 3 35.02	− 51.86	47.71	83 15 4.55	. .
Gr. 750 l. c. . .	16 4 27.70	+ 2.99	.55	4 4 25.14	257 36 28.94	− 78.34	47.74	85 17 22.86	25.75
ζ Oph.	31 41.795	− 0.463	.547	16 31 35.785	. . . .	. . .	. .	. . . .	. .
ε Urs. Min. . .	56 38.00	− 2.56	.55	16 56 29.99	270 6 35.54	− 50.05	47.92	82 12 2.43	25.43

c −ˢ.003 c' −ˢ.020 ΔT −5ˢ.549 Nadir 134° 57′ 22″.11 at 14ʰ.8 ℓ 45.9

b − .560 at 14ʰ 42ᵐ Equator 352 17 47 .61 at 15 .4 B 25.79

a − .076 at 14ʰ.6 Rate −ˢ.01 Rate +ˢ.001 Rates +0″.2 T 47

MAY 5, 1898. CIR. W, WT. 4, OBSR. T.

Star.	Transit.	Corr.	ΔT	App. R. A.	Circle.	Refr.	Eq.	App. Decl.	φ
	h m s	s	s	h m s	° ′ ″	″	″	° ′ ″	″
1 fol.	12 48 43.00	− 2.85	− 5.49	12 48 34.66	268 20 40.84	− 53.49	47.49	83 58 0.14	. .
ε Virg.	57 15.081	− 0.565	.486	12 57 9.030	. . . .	. . .	. .	. . . .	. .
α Urs. Min. l. c. .	13 20 49.94	+11.13	.49	1 20 55.58	261 4 49.69	− 69.14	47.49	88 45 53.06	25.65
ζ Virg.	29 38.803	− 0.514	.485	13 29 32.804	. . . .	. . .	. .	. . . .	. .
m	45 33.17	− 2.65	.48	13 45 25.04	269 2 54.24	− 52.12	47.49	83 15 45.37	. .
a l. c. . . .	14 1 4.71	+ 1.62	.48	2 1 0.85	255 24 14.94	− 85.76	47.49	83 5 1.69	. .
ι Virg.	10 49.080	− 0.490	.484	14 10 43.106	. . . .	. . .	. .	. . . .	. .
μ Virg.	37 50.302	− 0.492	.483	14 37 44.327	. . . .	. . .	. .	. . . .	. .
109 Virg. . . .	41 14.723	− 0.524	.483	14 41 8.716	. . . .	. . .	. .	. . . .	. .
P 221	51 33.511	− 0.581	.482	14 51 27.448	. . . .	. . .	. .	. . . .	. .
b l. c. . . .	15 8 4.16	+ 2.29	.48	3 8 0.97	256 52 18.41	− 81.20	47.49	84 33 9.72	. .
c l. c. . . .	33 7.26	+ 3.70	.48	3 33 5.48	258 38 48.23	− 76.01	47.49	86 19 44.73	. .
ε Serp.	45 53.037	− 0.536	.480	15 45 47.021	. . . .	. . .	. .	. . . .	. .
o	54 16.17	− 2.78	.48	15 54 7.91	269 3 35.02	− 52.37	47.49	83 15 4.84	. .
Gr. 750 l. c. . .	16 4 27.46	+ 2.83	.48	4 4 24.81	257 36 28.59	− 79.08	47.49	85 17 22.02	25.30
ζ Oph.	31 41.817	− 0.469	.479	16 31 35.869	. . . .	. . .	. .	. . . .	. .
ε Urs. Min. . .	56 37.99	− 2.53	.48	16 56 29.98	270 6 35.29	− 50.47	47.49	82 12 2.67	25.57

c −s.006 c' −s.023 ΔT − 5s.483 Nadir 134° 57′ 22″.07 t 43.3

b − .542 at 14h 38m Equator 352 17 47 .49 B 25.80

a − .113 at 14h.6 Rate +s.01 Rate +s.002 T 45

MAY 6, 1898. CIR. W, WT. 3, OBSR. T.

Star.	Transit.	Corr.	ΔT	App. R. A.	Circle.	Refr.	Eq.	App. Decl.	φ
	h m s	s	s	h m s	° ′ ″	″	″	° ′ ″	″
1 fol.	12 48 43.25	− 3.07	− 5.41	12 48 34.77	268 20 40.43	− 53.07	47.43	83 58 0.07	. .
ε Virg.	57 14.960	− 0.568	.407	12 57 8.985	. . . .	. . .	. .	. . . .	. .
α Urs. Min. l. c. .	13 20 49.72	+ 12.15	.41	1 20 56.46	261 4 48.05	− 68.63	47.43	88 45 51.99	24.63
ζ Virg.	29 38.787	− 0.517	.406	13 29 32.864	. . . .	. . .	. .	. . . .	. .
m	45 33.31	− 2.81	.40	13 45 25.10	269 2 53.98	− 51.72	47.43	83 15 45.17	. .
a l. c. . . .	14 1 4.66	+ 1.75	.40	2 1 1.01	255 24 13.95	− 85.04	47.43	83 5 1.08	. .
ι Virg.	10 49.037	− 0.492	.403	14 10 43.142	. . . .	. . .	. .	. . . .	. .
μ Virg.	37 50.180	− 0.494	.402	14 37 44.284	. . . .	. . .	. .	. . . .	. .
109 Virg. . . .	41 14.659	− 0.527	.402	14 41 8.730	. . . .	. . .	. .	. . . .	. .
P 221	51 33.468	− 0.585	.401	14 51 27.482	. . . .	. . .	. .	. . . .	. .
b l. c. . . .	15 8 3.99	+ 2.37	.40	3 8 0.96	256 52 17.31	− 80.22	47.43	84 33 9.66	. .
c l. c. . . .	33 6.49	+ 3.76	.40	3 33 4.85	258 38 47.43	− 74.95	47.43	86 19 45.05	. .
ε Serp.	45 53.023	− 0.538	.399	15 45 47.086	. . . .	. . .	. .	. . . .	. .
o	54 16.03	− 2.80	.40	15 54 7.83	269 3 33.92	− 51.61	47.43	83 15 5.12	. .
Gr. 750 l. c. . .	16 4 27.66	+ 2.81	.40	4 4 25.07	257 36 27.47	− 77.94	47.43	85 12 22.10	25.49
ζ Oph.	31 41.724	− 0.471	.396	16 31 35.857	. . . .	. . .	. .	. . . .	. .
ε Urs. Min. . .	56 38.08	− 2.49	.40	16 56 30.19	270 6 33.98	− 49.73	47.43	82 12 3.18	25.18

c −s.003 c' −s.020 ΔT − 5s.402 Nadir 134h 57′ 22″.22 t 47.9

b − .550 at 14h 38m Equator 352 17 47 .43 B 25.76

a − .101 Rate +s.003 T 48

MAY 9, 1898. CIR. W, WT. 3, OBSR. T.

Star.	Transit.	Corr.	ΔT	App. R. A.	Circle.	Refr.	Eq.	App. Decl.	φ
	h m s	s	s	h m s	° ′ ″	″	″	° ′ ″	″
n	15 10 36.85	− 8.59	− 5.17	15 10 23.09	264 41 24.41	− 59.10	46.43	87 37 21.12	. .
α Serp.	39 23.519	− 0.533	.171	15 39 17.815	. . . .	. . .	. .	. . . .	. .
ε Serp.	45 52.783	− 0.523	.171	15 45 47.089	. . . .	. . .	. .	. . . .	. .
Gr. 750 l. c. . .	16 4 26.82	+ 3.42	.17	4 4 25.07	257 36 23.96	− 76.56	46.43	85 17 20.97	25.51
ζ Oph.	31 41.549	− 0.450	.168	16 31 35.931	. . . .	. . .	. .	. . . .	. .
d l. c. . . .	55 33.56	+ 3.74	.17	4 55 32.13	258 8 49.84	− 74.99	46.43	85 49 48.42	. .
α Herculis . . .	17 10 8.528	− 0.589	.166	17 10 2.773	. . . .	. . .	. .	. . . .	. .
e l. c. . . .	29 17.65	+ 3.02	.17	5 29 15.50	257 28 2.17	− 76.97	46.43	85 8 58.77	. .
β Oph.	38 34.783	− 0.543	.165	17 38 29.075	. . . .	. . .	. .	. . . .	. .
δ Urs. Min. . .	18 5 26.73	− 5.40	.16	18 5 16.17	265 42 12.26	− 57.00	46.43	86 36 31.17	25.51
η Serp.	16 10.590	− 0.513	.163	18 16 4.914	. . . .	. . .	. .	. . . .	. .
51 H. Ceph. l. c. .	52 47.78	+ 5.17	.16	6 52 47.79	259 31 42.27	− 71.22	46.43	87 12 44.62	25.13
λ Aquilae . . .	19 0 58.690	− 0.513	.161	19 0 53.016	. . . .	. . .	. .	. . . .	. .
ω Aquilae . . .	13 9.949	− 0.591	.160	19 13 4.198	. . . .	. . .	. .	. . . .	. .
λ Urs. Min. . .	24 55.48	−15.66	.16	19 24 34.66	263 20 1.93	− 62.04	46.43	88 58 46.54	25.37
f l. c.	52 40.11	+ 2.11	.16	7 52 37.06	256 40 28.70	− 79.45	46.43	84 21 22.82	. .

c +ˢ.006 c' −ˢ.011 ΔT − 5ˢ.166 Nadir 134° 57′ 20″.92 t 59.8

b − .578 at 17ʰ 24ᵐ Equator 352 17 46 .43 B 25.91

a − .098 at 18ʰ.5 Rate −ˢ.02 Rate +ˢ.003 T 61

MAY 11, 1898. CIR. W, WT. 3, OBSR. T.

Star.	Transit.	Corr.	ΔT	App. R. A.	Circle.	Refr.	Eq.	App. Decl.	φ
	h m s	s	s	h m s	° ′ ″	″	″	° ′ ″	″
n	15 10 34.05	− 5.94	− 4.89	15 10 23.22	264 41 26.08	− 59.20	48.23	87 37 21.35	. .
α Serp.	39 23.306	− 0.586	.890	15 39 17.830	. . . .	. . .	. .	. . . .	. .
ε Serp.	45 52.612	− 0.581	.889	15 45 47.142	. . . .	. . .	. .	. . . .	. .
Gr. 750 l. c. . .	16 4 28.15	+ 1.99	.89	4 4 25.25	257 36 25.14	− 76.71	48.23	85 17 20.20	25.47
ζ Oph.	31 41.349	− 0.536	.885	16 31 35.928	. . . .	. . .	. .	. . . .	. .
d l. c. . . .	55 34.96	+ 2.13	.88	4 55 32.21	258 8 51.90	− 75.14	48.23	85 49 48.53	. .
α Herculis . .	17 10 8.257	− 0.628	.881	17 10 2.748	. . . .	. . .	. .	. . . .	. .
e l. c. . . .	29 18.61	+ 1.63	.88	5 29 15.36	257 28 3.42	− 77.11	48.23	85 8 58.08	. .
β Oph.	38 34.548	− 0.599	.878	17 38 29.071	. . . .	. . .	. .	. . . .	. .
δ Urs. Min. . .	18 5 25.09	− 3.56	.88	18 5 16.65	265 42 14.16	− 57.13	48.23	86 36 31.20	26.16
η Serp.	16 10.440	− 0.584	.874	18 16 4.992	. . . .	. . .	. .	. . . .	. .
51 H. Ceph. l. c. .	52 49.38	+ 2.78	.87	6 52 47.29	259 31 43.78	− 71.44	48.23	87 12 44.11	25.21
λ Aquilae . . .	19 0 58.555	− 0.588	.870	19 0 53.097	. . . .	. . .	. .	. . . .	. .
ω Aquilae . . .	13 9.856	− 0.635	.869	19 13 4.352	. . . .	. . .	. .	. . . .	. .
λ Urs. Min. . .	24 50.88	− 9.41	.87	19 24 36.60	263 20 4.19	− 62.18	48.23	88 58 46.22	26.25
f l. c.	52 40.84	+ 0.91	.86	7 52 36.89	256 40 30.56	− 79.56	48.23	84 21 22.77	. .

c +ˢ.010 c' −ˢ.007 ΔT − 4ˢ.880 Nadir 134° 57′ 22″.52 t 54.7

b − .568 at 17ʰ 24ᵐ Equator 352 17 48 .23 B 25.69

a − .227 at 18ʰ.5 Rate −ˢ.02 Rate +ˢ.006 T 55

277643

MAY 19, 1898. CIR. W, WT. 2, OBSR. T.

Star.	Transit.	Corr.	ΔT	App. R. A.	Circle.	Refr.	Eq.	App. Decl.	φ
	h m s	s	s	h m s	° ′ ″	″	″	° ′ ″	″
n		. .	. .	15 10 ——	264 41 23.91	− 60.58	48.03	87 37 24.70	. .
ε Serp.	15 45 51.990	− 0.451	− 4.390	15 45 47.149	. . . .	. . .	. .	. . . .	. .
Gr. 750 l. c. . . .	16 4 25.97	+ 3.65	.39	4 4 25.23	257 36 24.63	− 78.45	48.03	85 17 18.15	25.86
ζ Oph.	31 40.770	− 0.375	.387	16 31 36.008	. . . .	. . .	. .	. . . .	. .
d l. c. . . .	55 31.89	+ 4.08	.39	4 55 31.58	258 8 50.69	− 76.85	48.03	85 49 45.81	. .
α Herculis . .	17 10 7.814	− 0.511	.385	17 10 2.918	. . . .	. . .	. .	. . . .	. .
e l. c. . . .	29 15.44	+ 3.38	.38	5 29 14.47	257 28 2.63	− 78.81	48.03	85 8 55.79	. .
β Oph.	38 34.079	− 0.460	.384	17 38 29.235	. . . .	. . .	. .	. . . .	. .
δ Urs. Min. . .	18 5 27.79	− 5.77	.38	18 5 17.64	265 42 12.69	− 58.29	48.03	86 36 33.63	25.98
η Serp.	16 9.983	− 0.426	.382	18 16 5.175	. . . .	. . .	. .	. . . .	. .
51 H. Ceph. l. c. .	52 43.15	+ 5.95	.38	6 52 44.72	259 31 42.95	− 72.86	48.03	87 12 42.06	25.02
λ Aquilae . . .	19 0 58.105	− 0.420	.380	19 0 53.305	. . . .	. . .	. .	. . . .	. .
ω Aquilae . . .	13 9.434	− 0.502	.379	19 13 4.553	. . . .	. . .	. .	. . . .	. .
λ Urs. Min. . .	25 6.13	− 17.63	.38	19 24 44.12	263 20 3.28	− 63.53	48.03	88 58 48.28	25.83
f l. c. . . .	52 37.14	+ 2.65	.38	7 52 35.41	256 40 30.87	− 81.33	48.03	84 21 21.49	. .

c −ˢ.013 c' −ˢ.030 ΔT −4ˢ.384 Nadir 134° 57′ 22″.38 t 45.6

b − .500 at 17ʰ 40ᵐ Equator 352 17 48 .03 B 25.75

a − .024 at 18ʰ.5 Rate −ˢ.01 Rate +ˢ.003 T 44

MAY 23, 1898. CIR. W, WT. 3, OBSR. T.

Star.	Transit.	Corr.	ΔT	App. R. A.	Circle.	Refr.	Eq.	App. Decl.	φ
	h m s	s	s	h m s	° ′ ″	″	″	° ′ ″	″
n	15 10 34.73	− 7.93	− 4.61	15 10 22.19	264 41 23.22	− 60.22	48.02	87 37 25.02	. .
α Serp.	39 23.063	− 0.493	.611	15 39 17.959	. . . .	. . .	. .	. . . .	. .
ε Serp.	45 52.369	− 0.483	.612	15 45 47.274	. . . .	. . .	. .	. . . .	. .
Gr. 750 l. c. . . .	16 4 26.78	+ 3.41	.61	4 4 25.58	257 36 22.78	− 77.60	48.02	85 17 17.16	26.10
ζ Oph.	31 41.149	− 0.411	.613	16 31 36.125	. . . .	. . .	. .	. . . .	. .
d l. c. . . .	55 32.39	+ 3.97	.61	4 55 31.75	258 8 49.05	− 75.88	48.02	85 49 45.15	. .
α Herculis . . .	17 10 8.157	− 0.548	.614	17 10 2.995	. . . .	. . .	. .	. . . .	. .
e l. c. . . .	29 15.70	+ 3.39	.61	5 29 14.48	257 28 0.77	− 77.85	48.02	85 8 54.90	. .
β Oph.	38 34.333	− 0.498	.615	17 38 29.220	. . . .	. . .	. .	. . . .	. .
δ Urs. Min. . .	18 5 29.03	− 6.00	.62	18 5 18.41	265 42 10.54	− 57.68	48.02	86 36 35.16	25.75
η Serp.	16 10.319	− 0.463	.616	18 16 5.240	. . . .	. . .	. .	. . . .	. .
51 H. Ceph. l. c. .	52 42.57	+ 6.40	.62	6 52 44.35	259 31 41.24	− 72.04	48.02	87 12 41.18	25.29
λ Aquilae . . .	19 0 58.462	− 0.458	.618	19 0 53.386	. . . .	. . .	. .	. . . .	. .
ω Aquilae . . .	13 9.756	− 0.550	.618	19 13 4.588	. . . .	. . .	. .	. . . .	. .
λ Urs. Min. . .	25 10.78	− 19.42	.62	19 24 46.74	263 20 1.41	− 62.74	48.02	88 58 49.35	25.84
f. l. c. . . .	52 36.49	+ 2.98	.62	7 52 34.85	256 40 28.84	− 80.34	48.02	84 21 20.48	. .

c −ˢ.006 c' −ˢ.023 ΔT −4ˢ.615 Nadir 134° 57′ 22″.33 t 50.9

b − .542 at 17ʰ.6 Rate −ˢ.01 at 17ʰ 24ᵐ Equator 352 17 48 .02 B 25.78

a − .032 Rate −ˢ.002 T 49

MAY 24, 1898. CIR. E, WT. 4, OBSR. T.

Star.	Transit.	Corr.	ΔT	App. R. A.	Circle.	Refr.	Eq.	App. Decl.	φ
	h m s	s	s	h m s	° ′ ″	″	″	° ′ ″	″
n	15 10 35.83	− 10.80	− 4.67	15 10 20.36	365 12 28.28	+ 58.99	1.76	87 37 25.51	. .
α Serp.	39 22.965	− 0.331	.672	15 39 17.962	. . . .	. . .	. .	. . . .	. .
ε Serp.	45 52.194	− 0.317	.673	15 45 47.204	. . . .	. . .	. .	. . . .	. .
Gr. 750 l. c. . .	16 4 25.54	+ 4.86	.67	4 4 25.73	372 17 28.41	+ 76.42	1.76	85 17 16.93	25.92
ζ Oph.	31 41.022	− 0.218	.674	16 31 36.130	. . . .	. . .	. .	. . . .	. .
d l. c. . . .	55 31.21	+ 5.34	.67	4 55 31.88	371 45 2.54	+ 74.90	1.76	85 49 44.32	. .
α Herculis . .	17 10 8.092	− 0.401	.675	17 10 3.016	. . . .	. . .	. .	. . . .	. .
e l. c. . . .	29 14.99	+ 4.43	.68	5 29 14.74	372 25 50.24	+ 76.96	1.76	85 8 54.56	. .
β Oph.	38 34.344	− 0.336	.676	17 38 29.332	. . . .	. . .	. .	. . . .	. .
δ Urs. Min. . .	18 5 30.38	− 6.89	.68	18 5 18.81	364 11 40.25	+ 57.07	1.76	86 36 35.56	25.42
η Serp.	16 10.244	− 0.293	.678	18 16 5.273	. . . .	. . .	. .	. . . .	. .
51 H. Ceph. l. c. .	52 41.64	+ 7.48	.68	6 52 44.44	370 22 9.32	+ 71.22	1.76	87 12 41.22	25.36
λ Aquilae . . .	19 0 58.387	− 0.291	.679	19 0 53.417	. . . .	. . .	. .	. . . .	. .
ω Aquilae . . .	13 9.700	− 0.396	.679	19 13 4.625	. . . .	. . .	. .	. . . .	. .
λ Urs. Min. . .	25 13.43	− 21.13	.68	19 24 47.62	366 33 49.41	+ 62.04	1.76	88 58 49.69	25.53
f l. c. . . .	52 35.71	+ 3.34	.68	7 52 34.37	373 13 22.30	+ 79.42	1.76	84 21 20.04	. .

c +^{s}.006 c' −^{s}.011 ΔT −4^s.676 Nadir 134° 56′ 27″.24 t 57.2

b − .467 at 17^h 24^m Equator 277 36 1 .76 B 25.76

a + .122 at 18^h.1 Rate −^{s}.02 Rate −^{s}.002 T 59

MAY 25, 1898. CIR. E, WT. 3, OBSR. T.

Star.	Transit.	Corr.	ΔT	App. R. A.	Circle.	Refr.	Eq.	App. Decl.	φ
	h m s	s	s	h m s	° ′ ″	″	″	° ′ ″	″
n	15 10 32.56	− 6.77	− 4.73	15 10 21.06	365 12 29.41	+ 59.82	3.01	87 37 26.22	. .
α Serp.	39 23.136	− 0.484	.728	15 39 17.924	. . . .	. . .	. .	. . . .	. .
ε Serp.	45 52.401	− 0.475	.729	15 45 47.197	. . . .	. . .	. .	. . . .	. .
Gr. 750 l. c. . .	16 4 27.75	+ 2.65	.73	4 4 25.67	372 17 29.24	+ 77.58	3.28	85 17 16.47	25.65
ζ Oph.	31 41.300	− 0.416	.730	16 31 36.154	. . . .	. . .	. .	. . . .	. .
d l. c. . . .	55 33.12	+ 2.96	.73	4 55 31.35	371 45 3.48	+ 76.14	3.54	85 49 43.92	. .
α Herculis . .	17 10 8.321	− 0.524	.731	17 10 3.066	. . . .	. . .	. .	. . . .	. .
e l. c. . . .	29 16.48	+ 2.42	.73	5 29 14.17	372 25 51.34	+ 78.50	3.71	85 8 53.87	. .
β Oph.	38 34.530	− 0.485	.732	17 38 29.313	. . . .	. . .	. .	. . . .	. .
δ Urs. Min. . .	18 5 27.95	− 4.50	.73	18 5 18.72	364 11 41.31	+ 58.49	3.89	86 36 35.91	25.27
η Serp.	16 10.509	− 0.459	.734	18 16 5.316	. . . .	. . .	. .	. . . .	. .
51 H. Ceph. l. c. .	52 44.86	+ 4.33	.73	6 52 44.46	370 22 10.55	+ 73.04	4.12	87 12 40.53	24.84
λ Aquilae . . .	19 0 58.601	− 0.456	.735	19 0 53.410	. . . .	. . .	. .	. . . .	. .
ω Aquilae . . .	13 9.965	− 0.520	.735	19 13 4.710	. . . .	. . .	. .	. . . .	. .

c +^{s}.003 c' −^{s}.014 ΔT −4^s.732 Nadir 134° 56′ 29″.15 at 17^h.6 t (46.7)

b − .499 at 17^h 24^m Equator 277 36 3 .77 at 17 .7 B 25.72

a − .094 at 17^h.8 Rate −^{s}.02 Rate −^{s}.002 Rates +0″.3 T 48

MAY 28, 1898. CIR. E, WT. 1, OBSR. T.

Star.	Transit.	Corr.	ΔT	App. R. A.	Circle.	Refr.	Eq.	App. Decl.	φ
	h m s	s	s	h m s	° ′ ″	″	″	° ′ ″	″
n	15 10 32.83	− 6.62	− 5.02	15 10 21.19	365 12 29.39	+ 60.76	3.37	87 37 26.78	. .
α Serp.	39 23.436	− 0.443	.023	15 39 17.970	. . . .	. . .	. .	. . . .	. .
ε Serp.	45 52.665	− 0.434	.023	15 45 47.208	. . . .	. . .	. .	. . . .	. .
Gr. 750 l. c.	16 4 28.22	+ 2.73	.02	4 4 25.93	372 17 29.64	+ 78.81	3.64	85 17 15.19	24.88
ζ Oph.	31 41.536	− 0.367	.026	16 31 36.143	. . . .	. . .	. .	. . . .	. .
d l. c.	55 33.17	+ 3.13	.03	4 55 31.27	371 45 3.79	+ 77.89	3.90	85 49 42.22	. .
α Herculis	17 10 8.557	− 0.478	.029	17 10 3.050	. . . .	. . .	. .	. . . .	. .
e l. c.	29 16.04	+ 2.63	.03	5 29 13.64	372 25 51.79	+ 80.28	4.07	85 8 52.00	. .
β Oph.	38 34.880	− 0.433	.030	17 38 29.417	. . . .	. . .	. .	. . . .	. .
δ Urs. Min.	18 5 28.76	− 4.75	.03	18 5 18.98	364 11 41.46	+ 59.41	4.25	86 36 36.62	25.10
η Serp.	16 10.744	− 0.400	.033	18 16 5.311	. . . .	. . .	. .	. . . .	. .
51 H. Ceph. l. c.	52 43.76	+ 4.87	.04	6 52 43.59	370 22 10.30	+ 74.10	4.48	87 12 40.08	24.81
λ Aquilae	19 0 59.023	− 0.391	.036	19 0 53.596	. . . .	. . .	. .	. . . .	. .
ω Aquilae	13 10.286	− 0.464	.037	19 13 4.785	. . . .	. . .	. .	. . . .	. .
λ Urs. Min.	25 10.22	− 14.89	.04	19 24 50.29	366 33 50.59	+ 64.62	4.64	88 58 50.57	25.19

c +s.010 c' −s.007 ΔT −5s.030 Nadir 134° 56′ 29″.20 at 17h.6 t (39.4)
b − .475 at 17h 24m Equator 277 36 4 .25 at 18 .1 B 25.79
a − .047 Rate −s.004 Rates +0″.3 T 43

MAY 30, 1898. CIR. E, WT. 2, OBSR. T.

Star.	Transit.	Corr.	ΔT	App. R. A.	Circle.	Refr.	Eq.	App. Decl.	φ
	h m s	s	s	h m s	° ′ ″	″	″	° ′ ″	″
n	15 10 31.83	− 7.00	− 5.10	15 10 19.73	365 12 30.22	+ 60.93	3.78	87 37 27.37	. .
α Serp.	39 23.550	− 0.486	.104	15 39 17.960	. . . .	. . .	. .	. . . .	. .
ε Serp.	45 52.859	− 0.478	.105	15 45 47.276	. . . .	. . .	. .	. . . .	. .
Gr. 750 l. c.	16 4 28.26	+ 2.78	.11	4 4 25.93	372 17 29.94	+ 78.93	3.78	85 17 14.91	25.42
ζ Oph.	31 41.708	− 0.412	.106	16 31 36.190	. . . .	. . .	. .	. . . .	. .
α Herculis	17 10 8.728	− 0.521	.107	17 10 3.100	. . . .	. . .	. .	. . . .	. .
e l. c.	29 16.84	+ 2.54	.11	5 29 14.27	372 25 51.59	+ 79.30	3.78	85 8 52.89	. .
β Oph.	38 35.030	− 0.477	.108	17 38 29.445	. . . .	. . .	. .	. . . .	. .
δ Urs. Min.	18 5 28.89	− 4.65	.11	18 5 19.13	364 11 42.05	+ 58.65	3.78	86 36 36.92	25.66
η Serp.	16 10.909	− 0.445	.109	18 16 5.355	. . . .	. . .	. .	. . . .	. .
51 H. Ceph. l. c.	52 43.34	+ 4.52	.11	6 52 42.75	370 22 10.84	+ 73.17	3.78	87 12 39.77	25.27
ω Aquilae	19 13 10.479	− 0.517	.111	19 13 4.851	. . . .	. . .	. .	. . . .	. .
λ Urs. Min.	25 10.85	− 13.88	.11	19 24 51.86	366 33 51.30	+ 63.73	3.78	88 58 51.25	25.24
f l. c.	52 37.17	+ 1.91	.11	7 52 33.97	373 13 23.17	+ 81.63	3.78	84 21 18.98	. .

c +s.013 c' −s.004 ΔT −5s.107 Nadir 134° 56′ 29″.08 t 43.0
b − .509 at 17h 10m Equator 277 36 3 .78 B 25.76
a − .080 at 18h.1 Rate −s.01 Rate −s.002 T 44

(9) **The Separate Observations.** The observations of the Fundamental Stars are first given, in the following pages. The B. J. place for 1898 has been corrected, by the application of the quantities published in A. N. 3440. The observations are given separately for the two culminations, and for both positions of the instrument. The separate observations of the Latitude accompany the observations of position. Proper motion has been included in the reduction of the Fundamental Stars.

No proper motion has been applied to the observations of the stars to be determined. The Precession for 1898, and the proper motion, are printed, for convenience of reduction.

43 H. Cephei.

Cat.	Mag.	R. A. 1898.0	Decl. 1898.0
		h m s	° ′ ″
B. J. + A.	4.3	0 54 46.75	85 42 35.54
Prec.		+7.292	+19.483
P. M.		+0.070	− 0.011

Date. 1897.	Circle. U. C.	Mean R. A. h m s	Mean Decl. ° ′ ″	φ ″
Sept. 22	W	0 54 39.26	85 42 15.95	25.33
23		39.29	16.41	24.61
28		39.19	15.44	25.87
29		39.50	15.51	25.64
1897.74	4	39.31	15.83	25.36
Oct. 4	E	39.37	16.51	24.95
8		39.44	16.35	25.10
11		39.59	16.22	25.29
18		39.29	15.84	25.79
1897.78	4	39.42	16.23	25.28
1897.76	8	0 54 39.37	85 42 16.03	25.32
1898.	L. C.			
Mar. 1	W	0 54 46.77	85 42 35.01	25.19
3		46.66	35.27	25.45
4		46.68	35.50	25.71
11		46.88	35.36	25.42
1898.18	4	46.75	35.28	25.44
Mar. 22	E	46.67	35.13	25.36
23		46.73	35.60	25.95
30		46.72	35.14	25.45
31		46.76	35.51	26.06
1898.24	4	46.72	35.34	25.70
1898.21	8	0 54 46.73	85 42 35.31	25.57
U. C.	8	46.73	35.51	25.32
L. C.	8	46.73	35.31	25.57
Mean	16	0 54 46.73	85 42 35.41	25.44
Obs.—A.		−0.02	−0.13	

α Urs. Min.

Cat.	Mag.	R. A. 1898.0	Decl. 1898.0
		h m s	° ′ ″
B. J. + A.	2.0	1 21 43.21	88 45 49.03
Prec.		+24.695	+18.791
P. M.		+ 0.129	− 0.002

Date. 1897.	Circle. U. C.	Mean R. A. h m s	Mean Decl. ° ′ ″	φ ″
Oct. 28	E	1 21 18.62	88 45 29.99	25.35
Nov. 1		17.48	29.60	25.78
3		18.45	30.16	25.25
8		18.72	30.43	25.00
1897.84	4	18.32	30.04	25.34
Nov. 10	W	17.80	30.51	24.40
12		18.12	30.08	25.21
15		18.51	30.03	24.87
16		18.30	30.57	24.40
1897.87	4	18.18	30.30	24.72
1897.86	8	1 21 18.25	88 45 30.17	25.03
1898.	L. C.			
April 20	E	1 21 43.14	88 45 48.94	25.66
22		43.79	48.72	25.29
26		43.20	49.15	25.77
May 2		43.47	49.13	26.01
1898.32	4	43.40	48.99	25.68
May 3	W	43.25	48.86	25.13
4		43.22	48.74	25.09
5		43.35	49.26	25.65
6		43.56	48.45	24.63
1898.34	4	43.34	48.83	25.12
1898.33	8	1 21 43.37	88 45 48.91	25.40
U. C.	8	42.98	48.97	25.03
L. C.	8	43.37	48.91	25.40
Mean	16	1 21 43.18	88 45 48.94	25.21
Obs. − A.		−0.03	−0.09	

Gr. 750.

Cat.	Mag.	R. A. 1898.0	Decl. 1898.0
		h m s	° ′ ″
B. J. + A.	6.4	4 4 30.99	85 17 9.18
Prec.		+17.269	+9.682
P. M.		+ 0.002	+0.015

Date. 1897.	Circle. U. C.	Mean R. A. h m s	Mean Decl. ° ′ ″	φ ″
Oct. 28	E	4 4 13.69	85 16 59.71	24.86
Nov. 1		13.60	59.54	25.07
3		13.75	59.49	25.15
8		13.69	59.29	25.37
1897.84	4	13.68	59.51	25.11
Nov. 10	W	13.67	59.27	24.87
12		14.06	59.50	25.02
15		13.96	59.49	24.64
16		13.55	59.45	24.75
Dec. 3		13.46	59.36	25.71
16		13.26	59.59	25.47
20		13.75	59.52	25.58
21		14.03	59.85	25.04
1897.91	8	13.72	59.50	25.13
Dec. 22	E	13.71		
24		13.84	59.40	25.41
27		13.95	59.25	25.62
28		13.69	59.32	25.48
1897.99	4	13.80	59.32	25.50
1897.91	16	4 4 13.73	85 16 59.46	25.22
1898.	L. C.			
April 20	E	4 4 30.26	85 17 8.98	25.53
22		30.99	8.86	25.28
26		30.87	9.08	25.55
May 2		31.01	9.23	25.96
1898.32	4	30.78	9.04	25.58
May 3	W	30.97	9.03	25.15
4		31.04	9.56	25.75
5		30.71	9.06	25.30
6		30.96	9.46	25.49
9		30.88	9.18	25.51
11		31.03	8.94	25.47
19		30.93	9.39	25.86
23		30.95	9.59	26.10
1898.36	8	30.93	9.28	25.58
May 24	E	31.03	9.62	25.92
25		30.91	9.41	25.65
28		31.01	8.96	24.88
30		30.87	9.30	25.42
1898.41	4	30.95	9.32	25.47
1898.36	16	4 4 30.90	85 17 9.23	25.55
U. C.	16	30.99	9.18	25.22
L. C.	16	30.90	9.23	25.55
Mean	32	4 4 30.95	85 17 9.20	25.38
Obs. − A.		−0.04	+0.02	

51 H. Cephei.

Cat.	Mag.	R. A. 1898.0	Decl. 1898.0
		h m s	° ′ ″
B. J. + A.	5.1	6 52 44.62	87 12 29.82
Prec.		+29.763	−4.575
P. M.		− 0.041	−0.051

Date. 1897.	Circle. L. C.	Mean R. A. h m s	Mean Decl. ° ′ ″	φ ″
Aug. 31	E	6 52 14.47	87 12 34.93	25.85
Sept. 1		13.96	33.98	25.10
8		14.82	34.32	25.21
9		14.99	34.05	25.09
1897.68	4	14.56	34.32	25.31
Sept. 10	W	14.47	34.19	24.97
13		14.92	34.00	24.59
14		14.54	33.72	24.26
16		14.60	33.89	24.61
1897.70	4	14.63	33.95	24.61
1897.69	8	6 52 14.60	87 12 34.13	24.96
1897.	U. C.			
Dec. 3	W	6 52 14.85	87 12 33.86	26.16
16		15.04	34.23	25.78
20		14.68	34.28	25.77
21		14.60	33.97	25.87
1897.96	4	14.79	34.08	25.89
Dec. 22	E	14.58	34.27	25.22
24		14.65	34.09	25.67
27		16.27	34.63	25.19
28		15.91	34.21	25.54
1897.99	4	15.35	34.30	25.40
1897.97	8	6 52 15.07	87 12 34.19	25.65
L. C.	8	14.60	34.13	24.96
U. C.	8	15.07	34.19	25.65
Mean	16	6 52 14.83	87 12 34.16	25.30

51 H. Cephei. (Con.)

Date. 1898.	Circle.	Mean R. A.	Mean Decl.	φ
	U. C.	h m s	° ′ ″	″
Jan. 26	E	6 52 43.23	87 12 30.42	24.75
27		44.63	30.18	25.11
28		44.65	29.92	25.36
Feb. 4		44.69	29.79	25.51
1898.08	4	44.30	30.08	25.18
Feb. 12	W	44.94	29.86	25.43
14		44.95	29.90	25.51
15		45.00	29.82	25.49
18		44.90	29.78	25.41
1898.13	4	44.95	29.84	25.46
1898.10	8	6 52 44.62	87 12 29.96	25.32
1898.	L. C.			
May 9	W	44.39	29.44	25.13
11		44.37	29.32	25.21
19		44.07	29.19	25.02
23		44.42	29.42	25.29
1898.37	4	44.31	29.34	25.16
May 24	E	44.68	29.70	25.36
25		44.88	29.24	24.84
28		44.63	29.53	24.81
30		44.21	29.79	25.27
1898.41	4	44.60	29.56	25.07
1898.39	8	6 52 44.46	87 12 29.45	25.12
U. C.	8	44.62	29.96	25.32
L. C.	8	44.46	29.45	25.12
1898	16	44.54	29.71	25.22
1897	16	44.55	29.57	25.30
Mean	32	6 52 44.55	87 12 29.64	25.26
Obs. – A.		– 0.07	– 0.18	

1 H. Draco.

Cat.	Mag.	R. A. 1898.0	Decl. 1898.0
		h m s	° ′ ″
B. J. + A.	4.3	9 22 33.35	81 46 37.91
Prec.		+ 8.940	– 15.503
P. M.		– 0.017	– 0.020

Date. 1897.	Circle. L. C.	Mean R. A. h m s	Mean Decl. ° ′ ″	φ ″
Aug. 31	E	9 22 24.38	81 46 51.99	23.89
Sept. 1		23.88	53.78	25.88
8		24.32	53.05	24.96
9		24.35	53.18	25.20
1897.68	4	24.23	53.00	24.98
Sept. 10	W	24.25	54.07	25.83
13		24.46	53.28	24.85
14		24.27	53.64	25.16
16		24.24	53.49	25.19
1897.70	4	24.30	53.62	25.26
1897.69	8	9 22 24.27	81 46 53.31	25.12
1898.	U. C.			
Jan. 26	E	9 22 33.27	81 46 37.75	25.51
27		33.34	37.70	25.68
28		33.03	37.85	25.52
Feb. 4		33.14	38.08	25.31
1898.08	4	33.19	37.84	25.50
Feb. 12	W	33.21	38.06	25.32
14		33.42	37.75	25.75
15		33.24	37.54	25.86
18		33.39	37.80	25.48
1898.13	4	33.31	37.79	25.60
1898.10	8	9 22 33.25	81 46 37.82	25.55
L. C.	8	33.21	37.79	25.12
U. C.	8	33.25	37.82	25.55
Mean	16	9 22 33.23	81 46 37.81	25.33
Obs. – A.		– 0.12	– 0.10	

30 H. Camelop.

Cat.	Mag.	R. A. 1898.0	Decl. 1898.0
		h m s	° ′ ″
B. J. + A.	5.0	10 18 39.37	83 4 39.29
Prec.		+7.785	−18.124
P. M.		−0.053	+ 0.033

Date. 1897.	Circle. L. C.	Mean R. A. h m s	Mean Decl. ° ′ ″	φ ″
Sept. 22	W	10 18 31.46	83 4 57.38	25.23
23		31.45	56.98	24.57
28		31.41	57.12	25.00
29		31.61	57.39	25.11
1897.74	4	31.48	57.22	24.98
Oct. 4	E	31.58	57.39	25.42
8		31.59	56.94	24.96
11		31.65	57.06	25.14
18		31.60	57.27	25.47
1897.78	4	31.60	57.16	25.25
1897.76	8	10 18 31.54	83 4 57.19	25.12
1898.	U. C.			
Mar. 1	W	10 18 39.43	83 4 39.18	25.83
3		39.39	39.15	25.86
4		39.41	39.30	25.74
11		39.34	39.33	25.56
1898.18	4	39.39	39.24	25.75
Mar. 22	W	39.20	39.14	25.92
23		39.45	39.38	25.80
30		39.43	38.90	26.24
31		39.32	39.17	26.21
1898.24	4	39.35	39.15	26.04
1898.21	8	10 18 39.37	83 4 39.19	25.89
L. C.	8	39.28	39.11	25.12
U. C.	8	39.37	39.19	25.89
Mean	16	10 18 39.33	83 4 39.15	25.51
Obs. − A.		0.04	−0.14	

ε Urs. Min.

Cat.	Mag.	R. A. 1898.0	Decl. 1898.0
		h m s	° ′ ″
B. J. + A.	4.3	16 56 24.82	82 12 18.73
Prec.		−6.319	−5.492
P. M.		+0.009	−0.003

Date. 1897.	Circle. L. C.	Mean R. A. h m s	Mean Decl. ° ′ ″	φ ″
Oct. 28	E	16 56 31.22	82 12 24.11	25.01
Nov. 1		30.94	23.68	24.62
3		31.02	24.30	25.27
8		31.18	24.35	25.34
1897.84	4	31.09	24.11	25.06
Nov. 10	W	31.06	23.98	24.45
12		31.43	24.87	25.72
15		31.17	23.71	24.17
16		31.12	24.40	24.93
1897.87	4	31.19	24.24	24.82
1897.86	8	16 56 31.14	82 12 24.17	24.94
1898.	U. C.			
April 20	E	16 56 24.83	82 12 18.45	26.03
22		25.12	18.45	25.88
26		24.77	19.00	25.38
May 2		25.00	18.34	26.30
1898.32	4	24.93	18.56	25.90
May 3	W	24.82	18.50	25.53
4		24.91	18.68	25.43
5		24.85	18.58	25.57
6		25.01	18.76	25.18
1898.34	4	24.90	18.63	25.43
1898.33	8	16 56 24.91	82 12 18.59	25.66
L. C.	8	24.82	18.69	24.94
U. C.	8	24.91	18.59	25.66
Mean	16	16 56 24.86	82 12 18.64	25.30
Obs. − A.		+0.04	−0.09	

δ Urs. Min.

Cat.	Mag.	R. A. 1898.0	Decl. 1898.0
		h m s	° ′ ″
B. J. + A.	4.3	18 5 11.72	86 36 46.81
Prec.		−19.509	+0.455
P. M.		+ 0.027	+0.040

Date. 1897.	Circle. L. C.	Mean R. A. h m s	Mean Decl. ° ′ ″	φ ″
Dec. 3	W	18 5 31.90	86 36 45.95	25.27
16		31.51	46.17	25.48
20		30.94	46.26	25.61
21		30.85	45.77	24.91
1897.96	4	31.30	46.04	25.32
Dec. 22	E	31.12	45.51	24.30
24		31.17	46.09	25.15
27		31.31	46.25	25.37
28		31.67	46.34	25.39
1897.99	4	31.32	46.05	25.05
1897.97	8	18 5 31.31	86 36 46.04	25.18
1898.	U. C.			
May 9	W	18 5 11.67	86 36 46.81	25.51
11		11.82	46.36	26.16
19		11.34	46.48	25.98
23		11.69	46.75	25.75
1898.37	4	11.63	46.60	25.85
May 24	E	11.99	46.87	25.42
25		11.80	46.95	25.27
28		11.71	46.81	25.10
30		11.63	46.45	25.66
1898.41	4	11.78	46.77	25.36
1898.39	8	18 5 11.70	86 36 46.68	25.60
L. C.	8	11.82	46.56	25.18
U. C.	8	11.70	46.68	25.60
Mean	16	18 5 11.76	86 36 46.62	25.39
Obs. − A.		+0.04	−0.19	

λ Urs. Min.

Cat.	Mag.	R. A. 1898.0	Decl. 1898.0
		h m s	° ′ ″
B. J. + A.	6.4	19 24 45.13	88 59 1.63
Prec.		−67.187	+7.248
P. M.		− 0.050	−0.006

Date. 1897.	Circle. U. C.	Mean R. A. h m s	Mean Decl. ° ′ ″	φ ″
Aug. 31	E	19 25 51.76	88 58 53.65	26.00
Sept. 1		51.12	53.88	25.97
8		52.38	54.03	25.63
9		52.19	53.59	26.18
1897.68	4	51.86	53.79	25.94
Sept. 10	W	51.76	54.37	25.14
13		52.29	53.98	25.34
14		51.81	54.21	25.06
16		51.76	53.65	25.80
1897.70	4	51.90	54.05	25.33
1897.69	8	19 25 51.88	88 58 53.92	25.64
1897.	L. C.			
Dec. 3	W	19 25 50.75	88 58 54.22	25.51
16		50.92	54.49	25.77
20		52.10	54.54	25.86
21		51.71	54.18	25.29
1897.96	4	51.37	54.36	25.61
Dec. 22	E	51.96	54.31	25.07
24		52.33	54.33	25.36
27		53.94	54.87	25.96
28		52.60	54.15	25.17
1897.99	4	52.71	54.42	25.39
1897.97	8	19 25 52.04	88 58 54.39	25.50
U. C.	8	51.88	53.92	25.64
L. C.	8	52.04	54.39	25.50
1897.83	16	19 25 51.96	88 58 54.15	25.57

λ Urs. Min. (Con.)

Date. 1898.	Circle. L. C.	Mean R. A. h m s	Mean Decl. ° ′ ″	φ ″
Jan. 26	E	19 24 43.60	88 59 1.81	25.53
27		45.11	1.90	25.74
28		46.60	1.72	25.55
Feb. 4		45.20	1.87	25.72
1898.08	4	45.13	1.82	25.63
Feb. 12	W	45.23	1.79	25.63
14		46.20	1.90	25.86
15		46.25	1.26	25.12
18		45.39	1.16	24.90
1898.13	4	45.77	1.53	25.38
1898.10	8	19 24 45.45	88 59 1.68	25.51
1898.	U. C.			
May 9	W	44.50	1.77	25.37
11		44.84	1.09	26.25
19		45.05	1.45	25.83
23		44.88	1.48	25.84
1898.37	4	44.82	1.45	25.82
May 24	E	45.14	1.58	25.53
28		45.11	1.54	25.19
30		45.20	1.69	25.24
1898.41	3	45.15	1.60	25.32
1898.39	7	19 24 44.98	88 59 1.52	25.57
L. C.	8	45.45	1.68	25.51
U. C.	7	44.98	1.52	25.57
1898	15	45.22	1.60	25.54
1897	16	44.85	1.46	25.57
Mean	31	19 24 45.03	88 59 1.53	25.56
Obs. – A.		– 0.10	– 0.10	

76 Draconis.

Cat.	Mag.	R. A. 1898.0 h m s	Decl. 1898.0 ° ′ ″
B. J. + A.	6.0	20 49 58.67	82 9 12.84
Prec.		– 4.080	+ 13.546
P. M.		+ 0.014	+ 0.008

Date. 1897.	Circle. U. C.	Mean R. A. h m s	Mean Decl. ° ′ ″	φ ″
Sept. 22	W	20 50 2.51	82 8 59.14	25.37
23		2.74	59.03	25.22
28		2.54	59.30	25.24
29		2.61	59.96	24.42
1897.74	4	2.60	59.36	25.06
Oct. 4	E	2.69	59.01	25.68
8		2.62	58.77	25.91
11		2.69	58.80	25.94
18		2.72	59.06	25.80
1897.78	4	2.68	58.91	25.83
1897.76	8	20 50 2.64	82 8 59.13	25.44
1898.	L. C.			
Mar. 1	W	20 49 58.71	82 9 13.32	26.20
3		58.77	13.07	25.95
4		58.63	13.03	25.99
11		58.68	12.80	25.56
1898.18	4	58.70	13.05	25.92
Mar. 22	E	58.74	12.71	[24.46]
23		58.78	12.83	25.88
30		58.65	12.70	25.71
31		58.58	13.28	26.53
1898.24	4	58.69	12.88	26.04
1898.21	8	20 49 58.69	82 9 12.97	25.98
U. C.	8	58.58	12.68	25.44
L. C.	8	58.69	12.97	25.98
Mean	16	20 49 58.64	82 9 12.83	25.71
Obs. – A.		– 0.03	– 0.01	

Cephei. Br. 256.

Cat.	Mag.	R. A. 1898.0	Decl. 1898.0
		h m s	° ′ ″
a.	6.9	2 1 7.39	83 4 54.87
Prec.		+8.628	+17.316
P. M.		+0.025	− 0.056

Date. 1897.	Circle. U. C.	Mean R. A.	Mean Decl.
		h m s	° ′ ″
Oct. 28	E	2 0 58.88	83 4 37.98
Nov. 1		59.00	38.03
3		59.17	38.02
8		59.05	38.53
1897.84	4	59.02	38.14
Nov. 10	W	58.92	37.87
12		58.83	38.14
15		59.13	38.18
16		59.00	37.82
1897.87	4	58.97	38.00
1897.86	8	2 0 59.00	83 4 38.07
1898.	L. C.		
April 20	E	2 1 7.90	83 4 55.26
22		7.64	54.50
26		7.63	55.43
May 2		7.64	55.03
1898.32	4	7.70	55.06
May 3	W	7.48	55.79
4		7.74	54.90
5		7.33	55.70
6		7.38	55.36
1898.34	4	7.48	55.44
1898.33	8	2 1 7.59	83 4 55.25
U. C.	8	7.62	55.39
L. C.	8	7.59	55.25
1898.09	16	2 1 7.60	83 4 55.32

Cephei. 147 Hs.

Cat.	Mag.	R. A. 1898.0	Decl. 1898.0
		h m s	° ′ ″
b.	5.9	3 7 7.96	84 33 0.03
Prec.		+13.325	+13.667
P. M.		+ 0.048	− 0.125

Date. 1897.	Circle. U. C.	Mean R. A.	Mean Decl.
		h m s	° ′ ″
Oct. 28	E	3 7 54.90	84 32 45.82
Nov. 1		54.61	45.27
3		54.66	45.69
8		54.54	45.47
1897.84	4	54.68	45.56
Nov. 10	W	54.64	45.68
12		53.97	45.89
15		54.74	45.55
16		54.66	45.89
1897.87	4	54.50	45.75
1897.86	8	3 7 54.59	84 32 45.66
1898.	L. C.		
April 20	E	3 8 8.01	84 32 59.29
22		8.00	59.10
26		8.03	59.89
May 2		8.32	59.54
1898.32	4	8.09	59.46
May 3	W	7.98	59.65
4		7.97	59.25
5		7.92	59.55
6		7.84	59.80
1898.34	4	7.93	59.56
1898.33	8	3 8 8.01	84 32 59.51
U. C.	8	7.90	59.33
L. C.	8	8.01	59.51
1898.09	16	3 8 7.96	84 32 59.42

Cephei. 149 Hs.

Cat.	Mag.	R. A. 1898.0	Decl. 1898.0
		h m s	° ′ ″
c.	5.9	3 33 15.17	86 19 33.23
Prec.		+19.767	+11.980
P. M.		+ 0.160	− 0.066

Date. 1897.	Circle. U. C.	Mean R. A. h m s	Mean Decl. ° ′ ″
Oct. 28	E	3 32 55.36	86 19 21.15
Nov. 1		55.11	21.55
3		55.02	21.85
8		55.33	21.29
1897.84	4	55.20	21.46
Nov. 10	W	55.33	20.74
12		54.29	20.95
15		55.74	21.16
16		55.11	20.85
1897.87	4	55.12	20.93
1897.86	8	3 32 55.16	86 19 21.19
1898.	L. C.		
April 20	E	3 33 14.75	86 19 33.14
22		14.77	33.04
26		15.10	33.36
May 2		14.80	32.85
1898.32	4	14.85	33.10
May 3	W	14.99	33.21
4		14.84	33.01
5		15.40	33.06
6		14.72	33.71
1898.34	4	14.99	33.25
1898.33	8	3 33 14.92	86 19 33.17
U. C.	8	14.91	33.18
L. C.	8	14.92	33.17
1898.09	16	3 33 14.92	86 19 33.18

Cephei. 157 Hs.

Cat.	Mag.	R. A. 1898.0	Decl. 1898.0
		h m s	° ′ ″
d.	6.3	4 55 36.34	85 49 35.07
Prec.		+20.674	+5.560
P. M.		+ 0.023	−0.078

Date. 1897.	Circle. U. C.	Mean R. A. h m s	Mean Decl. ° ′ ″
Dec. 3	W	4 55 14.42	85 49 29.42
16		15.59	29.72
20		15.66	29.92
21		15.73	29.84
1897.96	4	15.35	29.72
Dec. 22	E	15.81	29.38
24		15.16	29.03
27		15.63	29.79
28		15.64	29.33
1897.99	4	15.56	29.38
1897.97	8	4 55 15.46	85 49 29.55
1898.	L. C.		
May 9	W	4 55 36.26	85 49 34.79
11		36.42	35.41
19		36.23	35.14
23		36.29	35.73
1898.37	4	36.30	35.27
May 24	E	36.39	35.18
25		35.85	35.03
28		35.79	34.18
1898.40	3	36.01	34.80
1898.39	7	4 55 36.16	85 49 35.04
U. C.	8	36.13	35.12
L. C.	7	36.16	35.04
1898.18	15	4 55 36.14	85 49 35.08

Cephei. 158 Hs.

Cat.	Mag.	R. A. 1898.0	Decl. 1898.0
		h m s	° ′ ″
e.	6.3	5 29 17.22	85 8 44.78
Prec.		+18.673	+2.679
P. M.		+ 0.014	+0.009

Date. 1897.	Circle. U. C.	Mean R. A.	Mean Decl.
		h m s	° ′ ″
Dec. 3	W	5 28 57.23	85 8 41.85
16		57.98	41.78
20		58.23	41.53
21		58.14	41.77
1897.96	4	57.89	41.73
Dec. 22	E	58.32	41.52
24		58.28	41.31
27		58.25	41.66
28		58.49	41.54
1897.99	4	58.33	41.51
1897.97	8	5 28 58.11	85 8 41.62
1898.	L. C.		
May 9	W	5 29 17.11	85 8 44.40
11		17.09	44.21
19		16.86	44.25
23		16.91	44.58
1898.37	4	16.99	44.36
May 24	E	17.19	44.51
25		16.64	44.09
28		16.22	43.04
30		16.90	44.58
1898.41	4	16.74	44.06
1898.39	8	5 29 16.86	85 8 44.21
U. C.	8	16.78	44.31
L. C.	8	16.86	44.21
1898.18	16	5 29 16.82	85 8 44.26

Cephei. 109 Hs.

Cat.	Mag.	R. A. 1898.0	Decl. 1898.0
		h m s	° ′ ″
f.	6.2	7 52 31.71	84 21 9.66
Prec.		+14.994	−9.455
P. M.		− 0.006	−0.004

Date. 1897.	Circle. U. C.	Mean R. A.	Mean Decl.
		h m s	° ′ ″
Dec. 3	W	7 52 15.58	84 21 18.41
16		16.39	18.83
20		16.51	17.52
21		16.53	18.15
1897.96	4	16.25	18.23
Dec. 22	E	16.33	17.93
24		16.29	18.09
27		16.34	17.79
28		16.11	18.11
1897.99	4	16.27	17.98
1897.97	8	7 52 16.26	84 21 18.10
1898.	L. C.		
May 9	W	7 52 31.72	84 21 8.74
11		31.84	8.98
19		31.76	9.05
23		31.71	8.93
1898.37	4	31.76	8.93
May 24	E	31.35	8.69
30		31.78	8.84
1898.41	2	31.56	8.77
1898.39	6	7 52 31.66	84 21 8.85
U. C.	8	31.26	8.65
L. C.	6	31.66	8.85
1898.18	14	7 52 31.46	84 21 8.75

Urs. Min. 4 B.

Cat.	Mag.	R. A. 1898.0	Decl. 1898.0
		h m s	° ′ ″
g.	7.2	7 55 50.92	88 56 19.01
Prec.		+66.203	−9.710
P. M.		− 0.068	+0.020

Date. 1897.	Circle. L. C.	Mean R. A. h m s	Mean Decl. ° ′ ″
Aug. 31	E	7 54 43.21	88 56 28.68
Sept. 1		43.52	28.85
8		42.90	28.90
9		43.69	28.60
1897.68	4	43.33	28.76
Sept. 10	W	42.21	27.99
13		43.91	28.64
14		44.12	28.64
16		44.47	28.84
1897.70	4	43.68	28.53
1897.69	8	7 54 43.50	88 56 28.64
1898.	U. C.		
Jan. 26	E	7 55 52.04	88 56 18.63
27		51.26	17.66
28		51.54	17.25
Feb. 4		48.98	18.50
1898.08	4	50.95	18.01
Feb. 12	W	51.08	18.42
14		50.75	18.10
15		50.49	18.44
18		51.63	17.84
1898.13	4	50.99	18.20
1898.10	8	7 55 50.97	88 56 18.11
L. C.	8	49.87	18.97
U. C.	8	50.97	18.11
1897.90	16	7 55 50.42	88 56 18.54

Cephei. 121 Hs.

Cat.	Mag.	R. A. 1898.0	Decl. 1898.0
		h m s	° ′ ″
h.	6.3	8 54 5.87	84 35 26.71
Prec.		+13.309	−13.809
P. M.		+ 0.021	+ 0.033

Date. 1897.	Circle. L. C.	Mean R. A. h m s	Mean Decl. ° ′ ″
Aug. 31	E	8 53 51.83	84 35 39.38
Sept. 1		51.64	39.66
8		52.15	40.05
9		52.11	40.28
1897.68	4	51.93	39.84
Sept. 10	W	51.98	40.04
13		51.87	40.32
14		51.94	40.30
16		52.18	39.80
1897.70	4	51.99	40.12
1897.69	8	8 53 51.96	84 35 39.98
1898.	U. C.		
Jan. 26	E	8 54 5.27	84 35 25.77
27		6.29	26.30
28		5.79	26.23
Feb. 4		5.24	26.43
1898.08	4	5.65	26.18
Feb. 12	W	5.38	26.04
14		5.52	26.15
15		5.44	25.88
18		5.95	25.71
1898.13	4	5.57	25.94
1898.10	8	8 54 5.61	84 35 26.06
L. C.	8	5.28	26.18
U. C.	8	5.61	26.06
1897.90	16	8 54 5.44	84 35 26.12

Camelop. s 664.

Cat.	Mag.	R. A. 1898.0	Decl. 1898.0
		h m s	° ′ ″
i.	7.4	11 2 13.91	86 11 36.56
Prec.		+8.084	−19.418
P. M.		−0.033	0.000

Date. 1897.	Circle. L. C.	Mean R. A. h m s	Mean Decl. ° ′ ″
Sept. 22	W	11 2 5.42	86 11 56.18
23		5.55	56.68
28		5.86	56.24
29		5.53	56.52
1897.74	4	5.59	56.40
Oct. 4	E	5.32	55.66
8		5.67	56.00
11		5.33	56.33
18		5.59	56.18
1897.78	4	5.48	56.04
1897.76	8	11 2 5.53	86 11 56.22
1898.	U. C.		
Mar. 1	W	11 2 13.43	86 11 36.45
3		13.74	37.03
4		14.12	36.72
11		13.74	36.55
1898.18	4	13.76	36.69
Mar. 22	E	13.06	36.63
23		13.90	36.73
30		13.65	36.46
31		13.64	36.95
1898.24	4	13.56	36.69
1898.21	8	11 2 13.66	86 11 36.69
L. C.	8	13.62	36.80
U. C.	8	13.66	36.69
1897.98	16	11 2 13.64	86 11 36.74

Urs. Min. 3 Hs.

Cat.	Mag.	R. A. 1898.0	Decl. 1898.0
		h m s	° ′ ″
k.	6.2	12 14 22.61	88 15 55.19
Prec.		+0.305	−20.013
P. M.		−0.069	+0.066

Date. 1897.	Circle. L. C.	Mean R. A. h m s	Mean Decl. ° ′ ″
Sept. 22	W	12 14 21.24	88 16 15.01
23		21.84	15.00
28		22.00	14.98
29		22.18	15.58
1897.74	4	21.81	15.14
Oct. 4	E	21.52	14.86
8		22.14	15.06
11		22.29	14.85
18		22.60	15.26
1897.78	4	22.14	15.01
1897.76	8	12 14 21.98	88 16 15.07
1898.	U. C.		
Mar. 1	W	12 14 22.98	88 15 54.78
3		25.55	55.21
4		23.39	54.84
11		21.55	54.92
1898.18	4	23.37	54.94
Mar. 22	E	20.59	55.46
23		22.32	55.35
30		22.35	55.36
31		22.96	55.30
1898.24	4	22.05	55.37
1898.21	8	12 14 22.71	88 15 55.15
L. C.	8	22.28	55.06
U. C.	8	22.71	55.15
1897.98	16	12 14 22.49	88 15 55.11

32 H. Cam. prec.

Cat.	Mag.	R. A. 1898.0 h m s	Decl. 1898.0 ° ′ ″
l_1.	6.3	12 48 14.95	83 58 20.39
Prec.		+0.427	−19.609
P. M.		−0.011	+ 0.016

Date. 1897.	Circle. L. C.	Mean R. A. h m s	Mean Decl. ° ′ ″
Sept. 22	W	12 48 13.52	83 58 40.46
23		14.02	40.40
28		14.25	40.51
29		14.11	41.19
1897.74	4	13.97	40.64
Oct. 4	E	13.88	41.02
8		14.25	40.03
11		14.30	40.29
18		14.45	40.45
1897.78	4	14.22	40.45
1897.76	8	12 48 14.10	83 58 40.54
1898.	U. C.		
Mar. 1	W	12 48 14.91	83 58 20.17
3		14.86	20.39
4		14.82	21.03
11		14.51	20.40
1898.18	4	14.77	20.50
Mar. 22	E	14.17	19.88
23		14.71	20.90
30		14.71	20.54
31		14.85	20.87
1898.24	4	14.61	20.55
1898.21	8	12 48 14.69	83 58 20.52
L. C.	8	14.53	20.93
U. C.	8	14.69	20.52
1897.98	16	12 48 14.61	83 58 20.73

32 H. Cam. fol.

Cat.	Mag.	R. A. 1898.0 h m s	Decl. 1898.0 ° ′ ″
l_2.	5.5	12 48 22.47	83 58 2.53
Prec.		+0.422	−19.607
P. M.		−0.014	+ 0.019

Date. 1897.	Circle. L. C.	Mean R. A. h m s	Mean Decl. ° ′ ″
Oct. 28	E	12 48 21.86	83 58 22.04
Nov. 1		21.57	22.69
3		21.77	22.07
8		21.67	21.86
1897.84	4	21.72	22.16
Nov. 10	W	21.62	22.52
12		22.00	22.97
15		21.50	21.90
16		21.61	22.11
1897.87	4	21.68	22.37
1897.86	8	12 48 21.70	83 58 22.27
1898.	U. C.		
April 20	E	12 48 22.39	83 58 1.82
22		22.27	2.63
26		22.46	2.17
May 2		22.51	3.04
1898.32	4	22.41	2.42
May 3	W	22.07	2.44
4		22.31	2.49
5		22.23	2.38
6		22.49	2.07
1898.34	4	22.27	2.34
1898.33	8	12 48 22.34	83 58 2.38
L. C.	8	22.12	2.66
U. C.	8	22.34	2.38
1898.09	16	12 48 22.23	83 58 2.52

Cephei. 135 Hs.

Cat.	Mag.	R. A. 1898.0	Decl. 1898.0
		h m s	° ′ ″
m.	6.1	13 45 14.15	83 15 51.47
Prec.		−1.944	−17.976
P. M.		+0.021	− 0.042

Date. 1897.	Circle. L. C.	Mean R. A. h m s	Mean Decl. ° ′ ″
Oct. 28	E	13 45 16.05	83 16 9.53
Nov. 1		15.90	9.51
3		15.94	9.68
8		15.73	8.76
1897.84	4	15.90	9.37
Nov. 10	W	15.99	9.57
12		16.41	9.91
15		15.94	9.14
16		15.86	9.49
1897.87	4	16.05	9.53
1897.86	8	13 45 15.98	83 16 9.45
1898.	U. C.		
April 20	E	13 45 13.97	83 15 51.38
22		14.25	51.44
26		14.20	51.24
May 2		14.18	51.60
1898.32	4	14.15	51.42
May 3	W	14.15	51.38
4		14.03	51.56
5		14.20	51.65
6		14.36	51.17
1898.34	4	14.19	51.44
1898.33	8	13 45 14.17	83 15 51.43
L. C.	8	14.04	51.47
U. C.	8	14.17	51.43
1898.09	16	13 45 14.10	83 15 51.45

Urs. Min. 57 B.

Cat.	Mag.	R. A. 1898.0	Decl. 1898.0
		h m s	° ′ ″
n.	7.1	15 10 1.79	87 37 31.00
Prec.		−20.696	−13.545
P. M.		− 0.007	+ 0.029

Date. 1897.	Circle. L. C.	Mean R. A. h m s	Mean Decl. ° ′ ″
Dec. 3	W	15 10 23.24	87 37 44.69
16		22.42	44.11
20		23.24	45.06
21		23.55	43.39
1897.96	4	23.11	44.31
Dec. 22	E	21.60	44.70
24		23.05	44.53
27		21.48	44.75
28		22.71	44.87
1897.99	4	22.21	44.71
1897.97	8	15 10 22.66	87 37 44.51
1898.	U. C.		
May 9	W	15 10 1.42	87 37 30.96
11		1.73	30.65
19		—	31.47
23		2.63	30.66
1898.37	4	1.93	30.94
May 24	E	1.00	30.89
25		1.88	31.25
28		2.57	31.10
30		1.59	31.09
1898.41	4	1.76	31.08
1898.39	8	15 10 1.84	87 37 31.01
L. C.	8	1.93	30.98
U. C.	8	1.84	31.01
1898.18	16	15 10 1.88	87 37 31.00

Urs. Min. 33 Hs.

Cat.	Mag.	R. A. 1898.0	Decl. 1898.0
		h m s	° ′ ″
o.	7.5	15 54 0.25	83 15 18.49
Prec.		−6.565	−10.477
P. M.		+0.013	− 0.001

Date. 1897.	Circle. L. C.	Mean R. A. h m s	Mean Decl. ° ′ ″
Oct. 28	E	15 54 6.65	83 15 29.04
Nov. 1		6.40	29.11
3		6.41	29.02
8		6.41	29.26
1897.84	4	6.47	29.11
Nov. 10	W	6.40	29.84
12		6.68	29.99
15		6.44	29.10
16		6.36	29.65
1897.87	4	6.47	29.64
1897.86	8	15 54 6.47	83 15 29.38
1898.	U. C.		
April 20	E	15 53 60.13	83 15 18.79
22		60.18	18.80
26		59.99	19.07
May 2		60.24	18.75
1898.32	4	60.13	18.85
May 3	W	60.04	18.41
4		59.89	18.56
5		60.11	18.48
6		60.02	18.41
1898.34	4	60.02	18.47
1898.33	8	15 53 60.08	83 15 18.66
L. C.	8	59.90	18.91
U. C.	8	60.08	18.66
1898.09	16	15 53 59.99	83 15 18.78

Cephei. 3 Hs.

Cat.	Mag.	R. A. 1898.0	Decl. 1898.0
		h m s	° ′ ″
p.	7.0	20 14 15.87	84 22 16.39
Prec.		−8.230	+11.087
P. M.		−0.011	− 0.038

Date. 1897.	Circle. U. C.	Mean R. A. h m s	Mean Decl. ° ′ ″
Aug. 31	E	20 14 24.28	84 22 5.43
Sept. 1		24.65	4.02
8		24.06	4.44
9		23.93	4.80
1897.68	4	24.23	4.67
Sept. 10	W	24.41	4.17
13		24.35	4.68
14		24.61	4.51
16		23.91	5.28
1897.70	4	24.32	4.66
1897.69	8	20 14 24.27	84 22 4.67
1898.	L. C.		
Jan. 26	E	20 14 16.10	84 22 15.65
27		16.15	16.09
28		16.10	15.77
Feb. 4		16.29	15.98
1898.08	4	16.16	15.87
Feb. 12	W	16.22	15.90
14		16.10	16.28
15		16.45	16.00
18		16.03	16.29
1898.13	4	16.20	16.12
1898.10	8	20 14 16.18	84 22 16.00
U. C.	8	16.04	15.76
L. C.	8	16.18	16.00
1897.90	16	20 14 16.11	84 22 15.88

Cephei. Gr. 3548.

Cat.	Mag.	R. A. 1898.0 h m s	Decl. 1898.0 ° ′ ″
q.	7.3	21 19 57.65	86 36 54.20
Prec.		−11.458	+15.359
P. M.		+ 0.020	+ 0.022

Date. 1897.	Circle. U. C.	Mean R. A. h m s	Mean. Decl. ° ′ ″
Sept. 22	W	21 20 8.31	86 36 38.20
23		9.43	38.14
28		8.11	38.33
29		9.02	38.43
1897.74	4	8.72	38.27
Oct. 4	E	8.67	——
8		9.49	38.03
11		9.08	38.48
18		9.36	38.26
1897.78	4	9.15	38.26
1897.76	8	21 20 8.93	86 36 38.27
1898.	L. C.		
Mar. 1	W	21 19 57.41	86 36 53.32
3		57.40	53.77
4		57.59	53.93
11		57.68	53.57
1898.18	4	57.52	53.65
Mar. 22	E	58.79	53.39
23		57.79	53.93
30		57.67	54.13
31		57.23	53.31
1898.24	4	57.87	53.69
1898.21	8	21 19 57.69	86 36 53.67
U. C.	8	57.48	53.64
L. C.	8	57.69	53.67
1897.98	16	21 19 57.59	86 36 53.66

32 H. Cephei.

Cat.	Mag.	R. A. 1898.0 h m s	Decl. 1898.0 ° ′ ″
r.	5.3	22 21 26.29	85 35 41.01
Prec.		−4.162	+18.226
P. M.		+0.051	+ 0.048

Date. 1897.	Circle. U. C.	Mean R. A. h m s	Mean Decl. ° ′ ″
Aug. 31	E	22 21 30.78	85 35 22.37
Sept. 1		31.29	21.75
8		30.36	21.75
9		29.72	22.34
1897.68	4	30.54	22.05
Sept. 10	W	30.08	22.26
13		30.25	22.17
14		30.70	22.14
16		29.64	22.41
1897.70	4	30.17	22.24
1897.69	8	22 21 30.35	85 35 22 15
1898.	L. C.		
Jan. 26	E	22 21 26.00	85 35 40.81
27		26.46	40.72
28		26.35	40.60
Feb. 4		26.31	40.73
1898.08		26.28	40.71
Feb. 12	W	26.69	40.54
14		25.92	40.94
15		26.60	39.88
18		25.96	40.29
1898.13	4	26.29	40.41
1898.10	8	22 21 26.29	85 35 40.56
U. C.	8	26.20	40.38
L. C.	8	26.29	40.56
1897.90	16	22 21 26.24	85 35 40.47

36 H. Cephei.

Cat.	Mag.	R. A. 1898.0	Decl. 1898.0
		h m s	° ′ ″
s.	5.7	22 55 13.30	83 48 1.00
Prec.		−0.360	+19.256
P. M.		+0.064	+ 0.018

Date. 1897.	Circle. U. C.	Mean R. A. h m s	Mean Decl. ° ′ ″
Sept. 22	W	22 55 13.75	83 47 41.88
23		13.92	41.57
28		13.37	41.33
29		13.78	41.38
1897.74	4	13.70	41.54
Oct. 4	E	13.49	41.62
8		13.69	41.97
11		13.66	41.78
18		13.63	42.12
1897.78	4	13.62	41.87
1897.76	8	22 55 13.66	83 47 41.71
1898.	L. C.		
Mar. 1	W	22 55 13.20	83 48 1.60
3		13.41	1.90
4		13.00	1.52
11		13.19	0.83
1898.18	4	13.20	1.46
Mar. 22	E	13.40	1.34
23		13.30	1.30
30		13.50	1.03
31		13.51	1.03
1898.24	4	13.43	1.18
1898.21	8	22 55 13.31	83 48 1.32
U. C.	8	13.31	0.97
L. C.	8	13.31	1.32
1897.98	16	22 55 13.31	83 48 1.14

39 H. Cephei.

Cat.	Mag.	R. A. 1898.0	Decl. 1898.0
		h m s	° ′ ″
t.	5.9	23 27 48.83	86 44 41.36
Prec.		−0.217	+19.855
P. M.		+0.093	+ 0.017

Date. 1897.	Circle. U. C.	Mean. R. A. h m s	Mean. Decl. ° ′ ″
Sept. 22	W	23 27 49.37	86 44 21.37
23		49.48	20.83
28		49.32	21.01
29		49.43	20.49
1897.74	4	49.40	20.92
Oct. 4	E	49.21	21.61
8		48.84	22.35
11		49.37	21.58
18		49.15	21.70
1897.78	4	49.14	21.81
1897.76	8	23 27 49.27	86 44 21.37
1898.	L. C.		
Mar. 1	W	23 27 48.99	86 44 41.53
3		49.38	41.04
4		48.65	41.11
11		49.40	41.59
1898.18	4	49.10	41.32
Mar. 22	E	49.88	41.14
23		48.68	40.79
30		48.74	40.96
31		48.57	41.10
1898.24	4	48.97	41.00
1898.21	8	23 27 49.04	86 44 41.16
U. C.	8	49.06	41.23
L. C.	8	49.04	41.16
1897.98	16	23 27 49.05	86 44 41.20

Cephei. 125 Hs.

Cat.	Mag.	R. A. 1898.0 h m s	Decl. 1898.0 ° ′ ″
u.	6.3	23 51 40.09	82 37 23.99
Prec.		+2.697	+20.039
P. M.		+0.029	+ 0.015

Date. 1897.	Circle. U. C.	Mean R. A. h m s	Mean. Decl. ° ′ ″
Sept. 22	W	23 51 37.01	82 37 3.37
23		37.34	2.68
28		37.32	2.72
29		37.29	2.55
1897.74	4	37.24	2.83
Oct. 4	E	37.43	3.47
8		37.21	3.29
11		37.31	3.43
18		37.19	3.23
1897.78	4	37.28	3.35
1897.76	8	23 51 37.26	82 37 3.09

Cephei. 125 Hs. (Con.)

Date. 1898.	Circle. L. C.	Mean R. A. h m s	Mean Decl. ° ′ ″
Mar. 1	W	23 51 40.32	82 37 23.09
3		39.98	23.56
4		39.95	22.78
11		40.12	23.45
1898.18	4	40.09	23.22
Mar. 22	E	40.35	23.59
23		39.89	23.58
30		40.09	23.86
31		40.00	23.48
1898.24	4	40.08	23.63
1898.21	8	23 51 40.09	82 37 23.42
U. C.	8	39.96	23.13
L. C.	8	40.09	23.42
1897.98	16	23 51 40.02	82 37 23.28

ZODIACAL STARS.

(1) **Observations of 1898.** The following list of stars was observed at the request of Sir DAVID GILL, to furnish places for his Heliometer measures of the major planets. The observations have been reduced with places of a list of Fundamental stars, derived by Doctor GILL.

Should it be desired to use other places for the Fundamental stars, the results of these observations can be exactly reduced to the corrected system, by combining the corrections to each Fundamental star, in groups, corresponding to the employment of the stars in the original observations. Thus, all of the Fundamental stars which are designated, in the table following, as belonging to set I, were observed with the stars to be determined in set I; and the mean of the corrections to the eight Fundamentals of set I should be taken out, and applied to the observations of the Zodiacal stars in the corresponding set.

The same plan has been followed in all the observations of the Zodiacal stars, here published, and the mean group correction will be definite and final for the reduction to a new fundamental system.

The places of such of the Fundamental stars as are contained in the Berliner Jahrbuch are tabulated, with the application of the corrections derived by Doctor AUWERS, A. N. 3440, and the observed places are also included. These last depend upon the observations of eight Fundamentals each night. The number of observations is equally divided between Circle East and Circle West.

The observations were made upon sixteen nights from June 6 to July 5, inclusive, and have been reduced to the mean equinox 1898.0. No proper motions have been applied in the reductions, except for the B. J. stars, referred to above, for which AUWERS' proper motions have been included.

The zodiacal list contains 50 stars, of which 4 are among the Fundamental stars. There are, thus, 59 stars in all. Each star has been given four observations, two Circle East and two Circle West. Most of the Fundamentals have been observed in several sets, and the total number of observations in this series is about 400, including the Circumpolar stars and Nadirs.

FUNDAMENTAL STARS. 1898.0.

No.	Star.	Mag.	R. A. Gill.	Auwers.	Obs.	Decl. Gill.	Auwers.	Obs.	Set.
			h m s	s	s	° ′ ″	″	″	
1	γ Librae . . .	4.0	15 29 49.160	49.130	49.090	−14 26 57.43	57.49	57.29	I II III IV
2	λ Librae . . .	5.0	15 47 24.675	——	24.649	−19 51 43.53	——	43.59	I IV
3	β Scorpii . . .	2.0	15 59 30.242	30.265	30.282	−19 31 34.31	35.03	34.40	II
4	ω^2 Scorpii . .	4.6	16 1 25.290	——	25.263	−20 35 35.40	——	35.30	III
5	16 Ophiuchi . .	6.7	16 43 31.807	——	31.804	−24 27 40.81	——	41.12	II III
6	24 Ophiuchi* .	5.6	16 50 38.851	38.842	38.821	−22 59 17.60	17.58	17.62	I II III IV
7	η Ophiuchi . .	2.6	17 4 31.613	31.624	31.604	−15 35 54.88	55.11	54.93	I II III IV
8	θ Ophiuchi . .	3.4	17 15 44.618	44.642	44.668	−24 53 51.45	52.02	51.39	IV
9	X Sagit. . . .	var.	17 41 8.326	——	8.375	−27 47 30.99	——	30.43	I II III IV
10	B. A. C. 6060* .	6.5	17 49 54.958	54.972	54.963	−18 47 2.54	2.32	2.81	I II III IV
11	γ Sagit. . . .	2.8	17 59 15.268	15.292	15.333	−30 25 30.48	31.44	30.83	III IV
12	μ Sagit. . . .	4.1	18 7 39.739	39.770	39.777	−21 5 7.62	8.10	7.76	I
13	δ Sagit. . . .	2.8	18 14 27.792	——	27.805	−29 52 17.18	——	17.08	I II

*List of 303 Stars, B. J.

The following systematic differences, for the mean of eight stars, are derived from the above tabulation:

Auwers—Gill:	R. A. $+0^s.011$	$v \pm 0^s.015$
	Decl. $-0''.35$	$v \pm 0''.33$
6 stars Auwers' A. G. C.,	Decl. $-0''.50$	$v \pm 0''.25$

For the determination of systematic errors in Declination, there is the comparison between the Latitudes derived from observations of the Circumpolar stars, and from observations of the Fundamental stars of the list.

The value from sixty observations of five Circumpolar stars in this series, with AUWERS' corrections to the B. J. Declinations included, is $\varphi = 37^\circ\ 20'\ 25''.55$. Applying the correction for the Latitude Variation, $\varphi_0 = 25''.42$. This value agrees so well with that previously obtained from observations of Circumpolar stars, when each star has been observed at both culminations, that the series would appear to be consistent with the improved Declinations of the North stars.

The direct mean of the Latitudes from the thirteen Fundamental stars is $\varphi = 26''.14$. By weighting according to the number of observations, $\varphi = 26''.10$ and $\varphi_0 = 25''.98$. There is thus indicated a systematic difference of $0''.56$ between the observations of stars north and south of the zenith. This may be due in part to the use of Refractions larger than applicable here, or in part to systematic error of the adopted Declinations. For the eight stars found in AUWERS, the mean value would be $\varphi_0 = 26''.04$ with GILL'S Declinations; while with AUWERS' Declinations the mean value would be $25''.69$.

The Refraction correction will be discussed with more detail, in the series of observations of the Piazzi stars, contained in this volume. For the purpose of differential work, such as the present series, the errors due to Refraction are entirely negligible. The Poulkova Refractions, used in this series, are in con-

formity with the observations of the stars of AUWERS' A. G. C. system, but it is probable that this system will require a plus correction to South Declinations, to reconcile it with recent discussions of standard stars south of the Equator.

(2) **The Magnitude Correction to Transits.** The correction to transits, depending upon the magnitude, has been derived by a set of screen observations, made at the close of this series. The observations are so arranged that all differences are practically eliminated, except those due to the effect of magnitude, and of accidental error of observation. The set includes 120 transits, 20 stars upon six nights. The mean value is $0^s.019$ for an estimated reduction of $3\frac{1}{2}$ magnitudes. There would result a correction of $-0^s.006$ per magnitude, to be applied to transits, or to Right Ascensions, of faint stars, the screened stars being apparently recorded later than those observed at full brightness. The probable error of a single determination, or difference between two transits, is $\pm 0^s.024$; and the probable error of the final correction for one magnitude would be $\pm 0^s.001$. An earlier set of 150 transits, in 1896, gave $0^s.009$ per magnitude; and the mean of the two determinations would be $0^s.008$. The mean magnitude of the groups of Fundamental stars is between $4\frac{1}{4}$ and $4\frac{1}{2}$. Mr. H. K. PALMER, then holding a Fellowship at this Observatory, assisted in the screen observations.

The probable errors of the observations of this series have been obtained from a complete comparison, in which no residuals have been rejected. From the comparison of observations made in the same position there result the following, for one observation:

Probable error 1 observation R. A. $\pm 0^s.021$,
Probable error 1 observation Decl. $\pm 0''.18$,

the effect of graduation error not being included.

From the comparison of the observations made in the two positions of the instrument, there result the following, for the mean of four observations:

Probable error mean of 4 observations R. A. $\pm 0^s.012$,
Probable error mean of 4 observations Decl. $\pm 0''.14$,

the effect of graduation error being here included. The probable error of graduation derived from the above would be $\pm 0''.15$, a result confirmed by the actual measurement of the graduation errors of the 1° arcs.

Mr. R. T. CRAWFORD, then holding a Fellowship at this Observatory, assisted in the reductions of these observations.

The names and magnitudes of the stars, in the list following, are from Dr. GILL.

ZODIACAL STARS. 1898.0.

No.	Star.	Mag.	R. A. 1898.0.	Decl.	Set.
			h m s	° ′ ″	
1	λ Librae	5.0	15 47 24.653	−19 51 43.57	I
			24.645	43.61	IV
2	47 Librae	6.3	49 6.587	−19 4 53.88	II
3	L. 28986	7¾	51 13.795	−21 11 20.44	III
4	L. 29044 fol.	8.6	53 12.332	−19 38 45.54	I
5	L. 29094	7.5	55 7.325	−20 52 1.96	II
6	L. 29156	8	57 11.280	−19 33 25.03	III
7	β Scorpii	2.0	59 30.282	−19 31 34.40	II
8	S. D. 4269	7.5	59 42.670	−21 33 36.42	I
9	ω^1 Scorpii	4.1	16 0 50.312	−20 23 34.32	IV
10	ω^2 Scorpii	4.6	1 25.263	−20 35 35.30	III
11	ν Scorpii	4.5	6 3.910	−19 11 44.31	I
12	L. 29515	7.0	7 40.547	−21 8 22.20	II
13	B. A. C. 5808	6.5	8 45.975	−18 16 25.43	III
14	L. 29547	7½	8 50.267	−22 7 17.80	IV
15	B. A. C. 5423	6.5	11 1.375	−19 51 2.13	I
16	B. A. C. 5436	6.0	13 9.230	−19 58 8.62	II
17	S. D. 4266	8.0	14 34.643	−18 26 40.54	III
18	S. D. 4341	6.8	14 40.763	−21 35 43.41	IV
19	L. 29770	7.3	16 45.925	−22 52 39.64	I
20	ψ Ophiuchi	4.6	18 7.950	−19 47 55.13	II
21	S. D. 4368	8.5	19 28.818	−19 36 7.23	III
22	χ Ophiuchi	5.0	21 6.602	−18 13 29.37	IV
23	S. D. 4360	7.5	21 11.052	−21 53 16.32	I
24	S. D. 4366	7.8	23 17.335	−21 20 35.01	II
25	S. D. 4287	8.5	16 23 47.123	−18 26 57.69	III
26	ω Oph.	4.7	16 26 5.305	−21 14 53.33	IV
27	L. 30046	8.5	26 25.173	−20 32 1.19	I
28	S. D. 4381	8.4	28 48.423	−19 43 39.54	II
29	S. D. 4295	8.2	29 34.302	−18 27 40.76	III
30	S. D. 4391	8.0	31 34.000	−21 50 55.05	IV
31	L. 30207	8	32 12.530	−22 41 10.20	I
32	B. A. C. 5567	6.5	34 33.643	−20 12 34.74	II
33	B. A. C. 5580	5.7	35 53.818	−19 43 43.74	III
34	S. D. 4403	8.0	36 58.255	−21 8 54.17	IV
35	15 Oph.	6.5	39 0.490	−22 59 38.58	I
36	Cape 702	7½	43 29.917	−21 40 22.80	IV
37	ξ Oph.	4.5	17 14 53.408	−21 0 12.39	I
38	L. 31552 fol.	8.1	16 53.830	−20 6 59.21	II
39	B. A. C. 5866	6.5	18 35.948	−21 20 46.18	III
40	L. 31733	7.8	22 11.122	−20 52 43.89	I
41	S. D. 4644	7.8	23 42.528	−19 23 27.77	II
42	B. A. C. 6125	6.4	18 1 4.265	−21 27 15.33	I
43	C. G. C. 24648	8.3	1 33.707	−23 6 59.39	II
44	S. D. 4597	8.0	4 34.880	−22 15 31.18	III
45	1 Sagit.	5.3	5 29.862	−23 43 18.36	IV
46	μ Sagit.	4.1	7 39.777	−21 5 7.76	I
47	14 Sagit.	5.9	8 8.210	−21 44 25.55	II
48	L. 33516	7.6	10 20.255	−23 56 4.53	IV
49	S. D. 4655	8.2	11 47.465	−22 22 47.45	III
50	Lac. 7686	7.2	18 15 51.988	−22 58 6.51	IV

The entire list of stars above was reobserved in 1900, and the results will be given in a later portion of this volume, with the Precessions for 1900, and a comparison of the two sets of observations.

The results of this set were first published in the Astronomische Nachrichten, No. 3539, for January 16, 1899.

(3) **The Separate Observations.** There follow the separate observations of each star, including the Fundamentals:

OBSERVATIONS OF FUNDAMENTAL STARS.

γ Librae.

Date. 1898.	Circle.	R. A. 1898.0.	Decl. 1898.0.	Obs. φ
		h m s	° ′ ″	″
June 6	E	15 29 49.159	−14 26 57.16	26.05
7		.116	57.52	25.99
8		.128	57.29	25.95
9		.081	57.28	25.86
17		.158	57.45	25.99
20		.087	57.53	25.90
22		.002	56.91	26.12
23		.093	57.95	26.11
(8)		49.103	57.39	26.00

γ Librae.

Date. 1898.	Circle.	R. A. 1898.0.	Decl. 1898.0.	Obs. φ
		h m s	° ′ ″	″
June 24	W	15 29 49.084	−14 26 57.46	25.70
28		.116	56.74	25.41
29		.111	57.57	26.26
30		.054	56.50	25.64
July 1		.087	56.72	25.17
4		.078	57.73	26.46
5		.010	57.59	26.30
(7)		49.077	57.19	25.85

λ Librae.

Date. 1898.		Circle.	R. A. 1898.0. h m s	Decl. 1898.0 ° ′ ″	Obs. φ ″
June	6	E	15 47 24.669	−19 51 43.28	26.07
	7		.653	43.81	26.18
	20		.627	43.25	25.52
	23		.674	44.33	26.39
	(4)		24.656	43.67	26.04
June	24	W	24.634	43.64	25.78
	27		.658	43.53	26.65
July	4		.636	43.34	25.97
	5		.643	43.51	26.12
	(4)		24.643	43.51	26.13

β Scorpii.

June	8	E	15 59 30.273	−19 31 34.68	26.46
	9		.295	34.77	26.47
	(2)		30.284	34.72	26.46
June	28	W	30.272	34.03	25.82
	29		.289	34.13	25.94
	(2)		30.280	34.08	25.88

ω² Scorpii.

June	22	E	16 1 25.241	−20 35 35.81	27.05
	30	W	25.288	34.64	25.81
July	1		.256	35.45	25.93
	(2)		25.272	35.05	25.87

18 Ophiuchi.

June	8	E	16 43 31.786	−24 27 40.76	26.04
	9		.827	41.00	26.20
	17		.784	40.78	25.94
	22		.818	41.08	26.91
	(4)		31.804	40.90	26.27
June	28	W	31.798	41.14	26.43
	29		.823	41.23	26.54
	30		.787	41.49	27.25
July	1		.813	41.49	26.56
	(4)		31.805	41.34	26.69

24 Ophiuchi.

Date. 1898.		Circle.	R. A. 1898.0. h m s	Decl. 1898.0. ° ′ ″	Obs. φ ″
June	6	E	16 50 38.856	−22 59 18.42	27.14
	7		.841	17.46	25.76
	8		.829	17.55	26.04
	9		.803	17.41	25.82
	17		.806	17.36	25.73
	20		.822	17.21	25.41
	22		.840	17.38	26.42
	23		.796	16.93	24.92
	(8)		38.824	17.46	25.90
June	24	W	38.837	17.36	25.43
	27		.803	18.17	27.22
	28		.819	18.00	26.50
	29		.799	17.65	26.16
	30		.836	17.57	26.54
July	1		.800	17.90	26.18
	4		.822	17.58	26.14
	5		.832	18.05	26.59
	(8)		38.818	17.78	26.34

η Ophiuchi.

June	6	E	17 4 ——	−15 35 54.55	25.99
	7		31.606	55.10	26.12
	8		.578	55.66	26.87
	9		.610	55.23	26.36
	17		.564	55.18	26.27
	20		.635	55.87	26.79
	22		.615	55.14	26.90
	23		.596	54.66	25.37
	(8)		31.601	55.17	26.33
June	24	W	31.610	54.63	25.42
	27		.577	54.51	26.28
	28		.610	55.03	26.25
	29		.607	54.68	25.90
	30		.584	54.46	26.15
July	1		.641	54.77	25.77
	4		.633	54.68	25.96
	5		.596	54.73	25.99
	(8)		31.607	54.69	25.97

θ Ophiuchi.

Date. 1898.		Circle.	R.A. 1898.0. h m s	Decl. 1898.0. ° ′ ″	Obs. φ ″
June	20	E	17 15 44.654	−24 53 51.00	25.35
July	4	W	44.697	52.14	26.85
	5		.666	51.41	26.10
(2)			44.682	51.78	26.47

χ Sagittarii.

June	6	E	17 41 8.374	−27 47 30.34	25.67
	7		.383	30.69	25.60
	8		.415	30.13	25.23
	9		.384	29.89	24.91
	17		.402	30.46	25.44
	20		.306	29.70	24.51
	22		.417	30.51	26.16
	23		.345	30.32	24.92
(8)			8.378	30.26	25.31
June	24	W	8.407	30.76	25.44
	27		.389	30.62	26.28
	28		.337	30.65	25.76
	29		.344	30.72	25.85
	30		.399	31.40	26.98
July	1		.337	29.91	24.80
	4		.344	30.60	25.77
	5		.419	30.14	25.29
(8)			8.372	30.60	25.77

B. A. C. 6060.

June	6	E	17 49 54.958	−18 47 3.07	26.85
	7		.948	2.61	25.97
	8		.920	3.18	26.73
	9		.925	3.22	26.69
	17		.965	3.22	26.65
	20		.991	3.65	26.91
	22		.982	3.01	27.11
	23		.980	2.76	25.81
(8)			54.959	3.09	26.59
June	24	W	54.950	3.13	26.26
	27		.948	2.84	26.95
	28		.943	2.71	26.27
	29		.972	2.15	25.73
	30		55.007	2.51	26.54
July	1		.982	2.52	25.86
	4		.953	2.07	25.69
	5		.978	2.27	25.87
(8)			54.967	2.53	26.15

γ Sagittarii.

Date. 1898.		Circle.	R.A. 1898.0. h m s	Decl. 1898.0. ° ′ ″	Obs. φ ″
June	17	E	17 59 15.303	−30 25 30.30	25.79
	20		.344	30.69	26.01
	22		.358	30.26	26.42
	23		.364	30.52	25.63
(4)			15.342	30.44	25.96
June	30	W	15.313	31.59	27.68
July	1		.358	31.37	26.77
	4		.305	30.77	26.45
	5		.323	31.18	26.84
(4)			15.325	31.23	26.94

μ Sagittarii.

June	6	E	18 7 39.750	−21 5 7.79	26.49
	7		.789	8.07	26.35
(2)			39.770	7.93	26.42
June	24	W	39.757	7.41	25.46
	27		.807	7.77	26.80
(2)			39.782	7.59	26.13

δ Sagittarii.

June	6	E	18 14 27.738	−29 52 ——	——
	7		.779	16.53	25.25
	8		.818	16.49	25.40
	9		.811	16.92	25.75
(4)			27.787	16.65	25.47
June	24	W	27.833	17.36	25.85
	27		.804	17.65	27.12
	28		.853	17.47	26.39
	29		.802	17.58	26.51
(4)			27.823	17.51	26.47

No. 1.

Date. 1898.	Cir.	R. A. 1898.0. h m s	Decl. ° ′ ″
June 6	E	15 47 24.669	− 19 51 43.28
7		.653	43.81
20		.627	43.25
23		.674	44.33
24	W	.634	43.64
27		.658	43.53
July 4		.636	43.34
5		.643	43.51
		24.649	43.59

No. 2.

June 8	E	15 49 6.617	− 19 4 54.08
9		.577	54.02
28	W	.567	53.68
29		.586	53.75
		6.587	53.88

No. 3.

June 17	E	15 51 13.852	− 21 11 20.96
22		.741	20.57
30	W	.812	19.99
July 4		.780	20.25
		13.796	20.44

No. 4.

June 6	E	15 53 12.310	− 19 38 45.90
7		.430	45.51
24	W	.294	45.47
27		.295	45.28
		12.332	45.54

No. 5.

June 8	E	15 55 7.342	− 20 52 2.48
9		.274	2.52
28	W	.346	1.31
29		.342	1.51
		7.326	1.96

No. 6.

June 17	E	15 57 11.269	− 19 33 25.59
22		.312	25.20
30	W	.281	24.63
July 1		.262	24.71
		11.281	25.03

No. 7.

Date. 1898.	Cir.	R. A. 1898.0. h m s	Decl. ° ′ ″
June 8	E	15 59 30.273	− 19 31 34.68
9		.295	34.77
28	W	.272	34.03
29		.289	34.13
		30.282	34.40

No. 8.

June 6	E	15 59 42.662	− 21 33 36.50
7		.723	35.97
24	W	.657	36.71
27		.640	36.49
		42.670	36.42

No. 9.

June 20	E	16 0 50.341	− 20 23 34.48
23		.286	34.48
July 4	W	.328	34.54
5		.290	33.78
		50.311	34.32

No. 10.

June 22	E	16 1 25.241	− 20 35 35.81
30	W	.288	34.64
July 1		.256	35.45
		25.262	35.30

No. 11.

June 6	E	16 6 3.910	− 19 11 43.91
7		.961	44.86
24	W	.863	44.32
27		.908	44.17
		3.910	44.31

No. 12.

June 8	E	16 7 40.566	− 21 8 22.10
9		.524	22.44
28	W	.577	21.96
29		.521	22.30
		40.547	22.20

No. 13.

June 17	E	16 8 46.002	− 18 16 25.58
22		45.954	25.06
30	W	.956	25.83
July 1		.987	25.27
		45.975	25.43

No. 14.

Date. 1898.	Cir.	R. A. 1898 o. h m s	Decl. ° ′ ″
June 20	E	16 8 50.292	− 22 7 17.90
23		.305	17.99
July 4	W	.191	17.53
5		.278	17.79
		50.267	17.80

No. 15.

June 6	E	16 11 1.364	− 19 51 2.12
7		.390	1.91
24	W	.367	2.28
27		.378	2.22
		1.375	2.13

No. 16.

June 8	E	16 13 9.254	− 19 58 8.61
9		.204	8.86
28	W	.218	8.61
29		.246	8.42
		9.230	8.62

No. 17.

June 17	E	16 14 34.658	− 18 26 41.02
22		.681	40.32
30	W	.584	40.52
July 1		.653	40.31
		34.644	40.54

No. 18.

June 20	E	16 14 40.802	− 21 35 43.08
23		.819	43.67
July 4	W	.701	43.35
5		.733	43.53
		40.763	43.41

No. 19.

June 6	E	16 16 45.987	− 22 52 39.93
7		.925	39.24
24	W	.892	39.63
27		.894	39.78
		45.925	39.64

No. 20.

June 8	E	16 18 7.964	− 19 47 55.36
9		.964	55.93
28	W	.974	54.37
29		.912	54.87
		7.953	55.13

No. 21.

Date. 1898.	Cir.	R. A. 1898.0. h m s	Decl. ° ′ ″
June 17	E	16 19 28.827	− 19 36 7.22
22		.845	7.98
30	W	.786	6.27
July 1		.815	7.46
		28.818	7.23

No. 22.

June 20	E	16 21 6.673	− 18 13 29.74
23		.570	29.61
July 4	W	.578	28.89
5		.588	29.23
		6.602	29.37

No. 23.

June 6	E	16 21 11.071	− 21 53 16.16
7		.056	15.94
24	W	.050	16.96
27		.032	16.24
		11.052	16.32

No. 24.

June 8	E	16 23 17.357	− 21 20 35.20
9		.284	35.11
28	W	.367	35.00
29		.326	34.75
		17.334	35.01

No. 25.

June 17	E	16 23 47.105	− 18 26 57.87
22		.123	58.15
30	W	.110	57.53
July 1		.156	57.21
		47.123	57.69

No. 26.

June 20	E	16 26 5.348	− 21 14 53.86
23		.325	53.47
July 4	W	.294	52.82
5		.257	53.18
		5.306	53.33

No. 27.

June 6	E	16 26 25.182	− 20 32 1.27
7		.155	1.25
24	W	.181	1.23
27		.176	1.00
		25.173	1.19

No. 28.

June 8	E	16 28 48.446	− 19 43 39.88
9		.407	39.68
28	W	.443	39.34
29		.395	39.27
		48.423	39.54

No. 29.

June 17	E	16 29 34.359	− 18 27 40.82
22		.340	40.75
30	W	.230	41.08
July 1		.277	40.38
		34.302	40.76

No. 30.

June 20	E	16 31 34.015	− 21 50 55.37
23		.053	55.17
July 4	W	33.963	54.80
5		.968	54.85
		34.000	55.05

No. 31.

June 6	E	16 32 12.510	− 22 41 9.83
7		.552	10.13
24	W	.543	10.66
27		.524	10.20
		12.532	10.20

No. 32.

June 8	E	16 34 33.647	− 20 12 34.70
9		.611	35.07
28	W	.652	34.46
29		.662	34.75
		33.643	34.74

No. 33.

June 17	E	16 35 53.809	− 19 43 44.23
22		.770	44.05
30	W	.818	43.34
July 1		.874	43.34
		53.818	43.74

No. 34.

June 20	E	16 36 58.258	− 21 8 54.60
23		.316	54.47
July 4	W	.213	53.81
5		.233	53.80
		58.255	54.17

No. 35.

June 6	E	16 39 0.479	− 22 59 38.74
7		.536	38.53
24	W	.498	38.86
27		.445	38.17
		0.490	38.58

No. 36.

June 20	E	16 43 29.930	− 21 40 23.10
23		.922	22.76
July 4	W	.885	22.39
5		.930	22.94
		29.917	22.80

No. 37.

June 6	E	17 14 53.471	− 21 0 12.55
7		.414	12.27
24	W	.397	12.37
27		.352	12.36
		53.408	12.39

No. 38.

June 9	E	17 16 53.784	− 20 6 59.79
23		.819	59.22
28	W	.851	59.14
29		.849	58.71
		53.826	59.21

No. 39.

June 17	E	17 18 35.964	− 21 20 46.37
22		.942	46.24
30	W	.924	46.03
July 1		.967	46.06
		35.949	46.18

No. 40.

June 6	E	17 22 11.156	− 20 52 43.95
7		.105	43.51
24	W	.122	44.35
27		.103	43.75
		11.122	43.89

No. 41.

June 8	E	17 23 42.508	− 19 23 27.88
9		.543	28.06
28	W	.519	27.79
29		.544	27.34
		42.528	27.77

No. 42.

Date. 1898.	Cir.	R. A. 1898.o. h	m	s	Decl. °	′	″
June 6	E	18	1	4.268	−21	27	14.74
7				.256			15.02
24	W			.272			15.76
27				.257			15.81
				4.263			15.33

No. 43.

June 8	E	18	1	33.691	−23	6	59.62
9				.718			59.10
28	W			.676			59.44
29				.739			59.38
				33.706			59.39

No. 44.

June 17	E	18	4	34.866	−22	15	31.16
22				.900			30.86
30	W			.885			31.25
July 1				.869			31.45
				34.880			31.18

No. 45.

June 20	E	18	5	29.827	−23	43	18.67
23				.851			18.54
July 4	W			.865			18.15
5				.905			18.08
				29.862			18.36

No. 46.

June 6	E	18	7	39.750	−21	5	7.79
7				.789			8.07
24	W			.757			7.41
27				.807			7.77
				39.776			7.76

No. 47.

June 8	E	18	8	8.201	−21	44	25.72
9				.217			25.44
28	W			.203			25.59
29				.223			25.44
				8.211			25.55

No. 48.

June 20	E	18	10	20.270	−23	56	4.56
23				.207			4.74
July 4	W			.237			4.31
5				.298			4.52
				20.253			4.53

No. 49.

June 17	E	18	11	47.450	−22	22	47.54
22				.478			47.17
30	W			.504			47.68
July 1				.432			47.40
				47.466			47.45

No. 50.

June 20	E	18	15	51.948	−22	58	6.63
23				.998			6.85
July 4	W			.989			6.11
5				52.015			6.46
				51.988			6.51

(4) **Observations of 1900.** In this year seven short lists of Zodiacal stars were observed, to furnish places for the Heliometer measures of the major planets, made by Sir DAVID GILL, at the Cape of Good Hope.

The Fundamental stars were selected by Doctor GILL, for each list of stars, but no places were published by him. Accordingly the places of the Fundamental stars, used in these reductions, have been taken from the B. J., with Doctor AUWERS' corrections included, for all the stars found in that Catalogue. The stars remaining have been determined here, with AUWERS' corrected B. J. stars as Fundamental, and the observed places have been adopted, provisionally, for the reductions of the lists of stars to be determined.

The adopted places of all the stars, used as Fundamental, accompany each list, with the authority noted, in the Catalogue column.

As explained in the earlier observations of Zodiacal stars, in this volume, in order to reduce these observations to another system of Fundamental places, it will be necessary only to derive the appropriate corrections to each Fundamental star, and then to combine the corrections in groups, corresponding to the use of the stars.

Since all of the Fundamental stars of each list could not be observed with every star to be determined, the combination in groups is necessary, to reduce the strictly differential results to a new system. Each star determined has the set designated, in which it was observed. Thus, it will be necessary to apply the

mean of the corrections to the Fundamental stars observed in set I, to all of the stars determined in set I. And when a star has been observed in more than one set, the several sets should be combined separately.

The magnitudes and designations of all the stars have been taken from the published lists of the Royal Observatory, Cape of Good Hope.

Each star has been observed four times, in a set. Several stars have been observed in more than one. The instrument was not reversed during these observations, which were made while completing the observations of the Piazzi stars.

The first two lists were observed in the period January 10 to February 16, 1900, and required 300 observations, upon thirteen nights. The remaining five lists were observed in the months of May, June, and July, 1900, and required 500 observations, distributed among twenty-four nights. In all there are included 130 stars, of which 32 are Fundamentals. Of these stars, 54 had already been observed in 1898, with Fundamental stars selected by Dr. GILL, which differ in some cases from those of the present series. There are five Fundaments of the first series, for 1898, which are not included in this, making a total of 135 stars in all, for which 1200 observations have been made.

The probable errors of a single observation, derived from a full comparison, without the rejection of any residuals, are:

Right Ascension, $\pm 0^s.021$
Declination, $\pm 0''.18$,

not including the effect of graduation error. For the mean of four observations, and including the effect of graduation error, $\pm 0''.15$, there would result:

Probable error Right Ascension, mean of 4 observations, $\pm 0^s.011$
Probable error Declination, mean of 4 observations, $\pm 0''.18$

The circle microscopes were read upon four nights, in July, by Dr. R. T. CRAWFORD.

FUNDAMENTAL STARS. 1900.0.

Star.	Mag.	R. A. 1900.0.	Decl. 1900.0.	Cat.	Set.	Precessions.		Proper Motions.	
		h m s	° ′ ″			s	″	s	″
i Tauri	4.7	4 57 7.044	+21 26 49.73	A.	I II III	+3.5783	+ 5.434	+0.0039	−0.037
108 Tauri	6.8	5 9 26.974	+22 10 12.94	L. O.	I II III	3.6046	4.387	. .	. .
η Tauri	5.2	5 13 16.060	+21 59 34.94	L. O.	I II III	3.6016	4.061	. .	. .
o Tauri	6 o	5 21 37.703	+21 51 5.50	L. O.	II	3.6025	3.341	. .	. .
ζ Tauri	3.3	5 31 40.058	+21 4 53.73	A.	II III	3.5841	2.473	− .0005	− .021
1 Gemin.	4.7	5 58 2.500	+23 16 7.72	L. O.	I II III	3.6475	+ 0.172	. .	. .
3 Gemin.	6.5	6 3 39.645	+23 7 47.16	L. O.	I II III	3.6437	− 0.321	. .	. .
η Gemin.	var.	6 8 50.483	+22 32 9.39	A.	I II III	3.6270	0.774	− .0052	− .003
κ Gemin.	3.6	7 38 24.678	+24 38 16.46	A.	IV V VI	+3.6301	− 8.349	− .0031	− .044
φ Gemin.	4.9	7 47 22.691	+27 1 28.56	L. O.	IV V VI	3.6811	9.055	. .	. .
ω_1 Cancri	6.6	7 54 52.870	+25 39 59.78	L. O.	IV VI	3.6361	9.636	. .	. .
η Cancri	5.5	8 26 55.629	+20 46 51.66	A.	IV V VI	3.4793	11.993	− .0033	− .036
γ Cancri	4.8	8 37 30.040	+21 49 41.25	L. O.	IV V VI	3.4867	12.721	. .	. .
ι Cancri	4.2	8 40 38.843	+29 7 32.89	A.	IV V VI	+3.6421	− 12.933	− .0023	− .035

A comparison of the adopted places of the above list, with those of NEWCOMB's Fundamental Catalogue, gives, for 10 stars of the list of 14, the following corrections to the above:

Right Ascension, +0s.018
Declination, +0″.01

No proper motions have been applied in the reductions. The epoch of observation is 1900.1, and the proper motions may be considered negligible.

STARS FOR NEPTUNE. 1897, 1898, 1899, 1900.

Star.	Mag.	R. A. 1900.0.	Decl. 1900.0.	Set.	Precessions.	
		h m s	° ′ ″		s	″
b . .	6.3	5 19 13.726	+20 29 32.57	I	+3.5646	+3.548
c . .	6.0	21 37.702	+21 51 5.49	II	3.6025	3.341
d . .	8.6	21 51.376	+23 12 33.99	III	3.6382	3.324
e . .	8.6	24 8.808	+21 18 5.16	I	3.5875	3.124
f . .	6.5	27 42.165	+20 24 11.99	II	3.5649	2.817
g . .	8.4	28 53.806	+22 30 3.50	I	3.6213	2.713
h . .	3.3	31 40.076	+21 4 53.92	II III	3.5841	2.473
i . .	6.5	36 1.224	+22 36 36.42	I	3.6266	2.095
k . .	6.3	37 15.134	+23 9 24.93	II	3.6415	1.987
l . .	8.1	37 22.500	+21 22 8.88	III	3.5932	1.976
m . .	7.8	41 12.601	+22 29 27.99	I	3.6246	1.643
n . .	7.4	41 40.305	+20 54 16.21	II	3.5816	1.602
o . .	7.3	45 45.780	+23 21 21.90	I	3.6487	1.245
p . .	8.6	47 18.130	+22 3 2.44	II	3.6133	1.109
v . .	5.6	48 27.655	+20 15 27.69	III	3.6005	1.009
q . .	8.6	52 57.670	+20 40 1.05	I	3.5767	0.617
r . .	6.9	53 39.356	+21 35 47.58	II	3.6018	0.539
s . .	7.4	54 24.505	+22 53 37.81	III	3.6372	0.490
t . .	4.7	5 58 2.500	+23 16 7.65	I II III	+3.6475	+0.172

19 stars. Epoch 1900.1.

STARS FOR MARS. 1899.

Star.	Mag.	R. A. 1900.0.	Decl. 1900.0.	Set.	Precessions.	
		h m s	° ′ ″		s	″
a . .	6.6	7 54 52.874	+25 39 59.87	IV V VI	+3.6361	−9.636
b . .	6.4	55 2.553	+23 51 28.73	V	3.5912	9.647
e . .	8.1	8 1 52.532	+24 18 27.22	VI	3.5933	10.168
c . .	8.7	2 5.932	+25 0 15.89	IV	3.6099	10.184
d . .	8.1	2 18.047	+25 50 33.84	V	3.6299	10.201
f . .	6.0	4 25.890	+25 48 39.05	VI	3.6264	10.360
g . .	6.6	7 46.268	+23 26 19.25	IV	3.5648	10.609
h . .	8.7	8 44.278	+25 2 16.50	V	3.6010	10.683
k . .	6.2	14 35.466	+24 20 14.65	IV	3.5760	11.110
i . .	7.5	14 41.226	+25 39 5.16	V	3.6073	11.117
l . .	8.0	15 56.976	+23 16 12.20	VI	3.5496	11.211
m . .	7.5	20 43.042	+24 51 46.67	IV	3.5791	11.553
n . .	7.8	8 21 31.959	+23 28 50.16	V	3.5462	11.614

13 stars. Epoch 1900.1.

These two lists of stars were published in the Astronomische Nachrichten, No. 3673.

FUNDAMENTAL STARS. 1900.0.

Star.	Mag.	R. A. 1900.0.	Decl. 1900.0.	Cat.	Set.	Precessions.		Proper Motions.	
		h m s	° ′ ″			s	″	s	″
υ Leonis . .	4.5	11 31 49.687	− 0 16 17.91	A.	VII	+3.0719	−19.901	−0.0012	+0.050
β Virginis . .	3.7	11 45 29.142	+ 2 19 41.72	A.	VII	3.0761	20.012	+ .0480	− .260
b Virginis . .	5.2	11 54 49.547	+ 4 12 44.21	L. O.	VII	3.0749	20.047	. .	. .
η Virginis . .	4.1	12 14 47.335	− 0 6 39.91	A.	VII	3.0729	20.010	− .0055	− .010
P XII 170 . .	6.8	12 39 3.211	− 2 17 40.87	L. O.	VII	3.0818	19.762	. .	. .
35 Virginis. .	6.7	12 42 45.882	+ 4 7 7.55	L. O.	VII	3.0549	19.704	. .	. .
37 Virginis. .	7.2	12 46 31.437	+ 3 36 1.44	L. O.	VII	3.0557	19.640	. .	. .
83 Virginis. .	5.8	13 39 5.949	−15 40 34.14	L. O.	VIII IX	3.2707	18.206	. .	. .
89 Virginis. .	5.2	13 44 26.180	−17 38 10.25	A.	VIII IX	3.2596	18.006	−0.0082	−0.030
94 Virginis. .	6.8	14 0 59.943	− 8 24 52.87	L. O.	VIII IX	3.1723	17.322	. .	. .
λ Virginis . .	4.6	14 13 41.843	−12 54 39.99	L. O.	VIII	3.2416	16.736	. .	. .
Mayer 592 . .	6.0	14 31 40.444	−11 52 49.57	L. O.	VIII IX	3.2456	15.819	. .	. .
8 Librae . .	5.3	14 45 9.220	−15 34 54.13	A.	VIII IX	3.3187	15.069	− .0088	− .068

AUWERS' proper motions have been included in the reductions.

STARS FOR JUPITER. 1898.

Star.	Mag.	R. A. 1900.0.	Decl. 1900.0.	Set.	Precessions.	
		h m s	° ′ ″		s	″
a . .	4.1	12 14 47.337	− 0 6 39.81	VII	+3.0729	−20.010
b . .	8.8	20 10.787	− 0 30 57.64	VII	3.0738	19.974
c . .	7.7	21 38.830	+ 0 22 12.95	VII	3.0719	19.963
d . .	7.7	24 1.929	− 1 52 35.28	VII	3.0773	19.942
e . .	8.7	24 15.335	− 0 40 47.99	VII	3.0744	19.940
f . .	8.0	27 52.122	+ 0 16 37.02	VII	3.0719	19.904
g . .	7.2	29 15.697	− 0 51 23.47	VII	3.0753	19.889
h . .		31 57.753	− 1 46 2.99	VII	3.0784	19.857

8 stars. Epoch 1900.4.

STARS FOR JUPITER. 1899.

Star.	Mag.	R. A. 1900.0.	Decl. 1900.0.	Set.	Precessions.	
		h m s	° ′ ″		s	″
a . .	7.2	14 8 20.666	− 11 22 11.19	VIII	+3.2154	−16.989
b . .	7.8	13 26.230	− 11 36 5.86	IX	3.2236	16.748
c . .	4.6	13 41.839	− 12 54 39.92	VIII	3.2416	16.736
d . .	6.3	18 2.652	− 11 15 27.01	IX	3.2233	16.524
e . .	8.0	18 24.252	− 12 29 12.31	VIII	3.2408	16.506
f* . .	6.5	19 18.244	− 11 12 56.78	IX	3.2241	16.461
g . .	6.8	22 19.916	− 12 54 35.78	VIII	3.2509	16.308

7 stars. Epoch 1900.4.
*Dupl. mean.

These last two lists were published in the Astronomische Nachrichten, No. 3782.

FUNDAMENTAL STARS. 1900.0.

Star.	Mag.	R. A. 1900.0.	Decl. 1900.0.	Cat.	Set.	Precessions.		Proper Motions.	
		h m s	° ′ ″			s	″	s	″
ζ_1 Librae	6.2	15 22 36.897	−16 22 4.49	A.	X	+3.3763	−12.713	−0.0006	−0.034
γ Librae	4.0	15 29 55.827	−14 27 21.89	A.	X	3.3460	12.212	+ .0029	+ .018
κ Librae	5.0	15 36 10.951	−19 21 17.04	L. O.	X	3.4527	11.773	. .	. .
λ Librae	5.0	15 47 31.607	−19 52 5.29	L. O.	X	3.4773	10.955	. .	. .
24 Oph.	5.6	16 50 46.066	−22 59 29.54	A.	X XI	3.6144	5.966	− .0024	− .002
η Oph.	2.6	17 4 38.495	−15 36 4.14	A.	X XI	3.4352	4.797	+ .0005	+ .100
36 Oph. pr.	5.3	17 9 11.783	−26 27 22.33	L. O.	X XI	3.7215	4.408	. .	. .
ξ Oph.	4.5	17 15 0.567	−21 0 20.12	A.	XI	3.5760	3.911	+ .0151	− .197
C_2 Oph.	4.9	17 25 18.787	−23 53 7.49	A.	XII	3.6579	3.023	− .0020	− .027
X Sagit.	4–6	17 41 15.930	−27 47 33.96	L. O.	XI XII	3.7915	1.637	. .	. .
M. 722	6.5	17 50 2.024	−18 47 4.09	A.	XI XII	3.5269	−0.872	− .0007	− .003
λ Sagit.	3.1	18 21 47.951	−25 28 37.79	L. O.	XII	3.7070	+1.904	. .	. .
Br. 2335	6.0	18 32 55.599	−21 8 5.06	L. O.	XII	+3.5841	+2.872	. .	. .

Latitude from Fundamental Stars, 37° 20′ 25″.79. $\varphi_0 = 25''.65$.
Latitude from Circumpolar Stars: U. C., 25″.41; L. C., 25″.45; Mean, 25″.43. $\varphi_0 = 25''.29$.
Probable error L. O. Fundamental Star: R. A., ±0ˢ.008; Decl., ±0″.08.

STARS FOR JUPITER, 1900; SATURN, 1898; URANUS, 1898, 1899, 1900.

Star.	Mag.	R. A. 1900.0.	Decl. 1900.0.	Set.	Precession.	
		h m s	° ′ ″		s	″
η	5.0	15 47 31.614	−19 52 5.38	X	+3.4773	−10.955
ζ	6.3	49 13.518	−19 5 15.95	X	.4619	.832
ε	7.0	51 20.864	−21 11 42.18	X	.5117	.674
δ s. f.	8.6	53 19.331	−19 39 6.03	X	.4790	.527
γ	7.5	55 14.363	−20 52 22.64	X	.5100	.385
β	7.5	57 18.320	−19 33 45.18	X	.4814	.230
α B. J.	2.0	59 37.246	−19 31 54.51	X	.4830	.056
z	7.5	59 49.725	−21 33 56.64	X	.5301	.040
y	4.1	16 0 57.362	−20 23 54.22	X	.5043	9.931
x	4.6	1 32.334	−20 35 55.26	X	.5095	.910
w s. f.	4.5	6 10.925	−19 12 3.02	X	.4820	.554
v	7.0	7 47.619	−21 8 41.12	X	.5291	.429
u	6.5	8 52.936	−18 16 44.01	X	.4635	.346
μ	7.3	8 57.366	−22 7 36.98	X	.5538	.339
t	6.5	11 8.412	−19 51 20.03	X	.5023	.171
s	6.0	13 16.249	−19 58 26.98	X	.5070	.004
τ	8.0	14 41.585	−18 26 58.34	X	.4724	8.892
ν	6.8	14 47.877	−21 36 1.20	X	.5472	.884
ξ*	7.3	16 53.086	−22 52 57.52	X	.5808	.722
q	4.6	18 14.985	−19 48 12.07	X	.5073	.613
λ	8.5	19 35.839	−19 36 23.89	X	.5036	.505
p	5.0	21 13.619	−18 13 46.29	X	.4747	.376
o	7.5	21 18.161	−21 53 33.52	X	.5610	.371
π	7.8	23 24.481	−21 20 51.20	X	.5495	.203
θ	8.0	23 54.053	−18 27 14.91	X	.4801	.163
n	4.7	26 12.460	−21 15 8.80	X	.5496	7.980
κ	8.5	26 32.258	−20 32 16.52	X	.5323	.953
m	8.4	28 55.473	−19 43 55.22	X	.5149	.761
l	8.2	29 41.270	−18 27 56.38	X	.4849	.698
k	8.0	31 41.166	−21 51 10.72	X	.5694	.537
ρ	6.8	32 19.715	−22 41 25.38	X	.5911	.485
ω	7.1	32 45.198	−18 37 30.54	X	.4908	.451
i	6.5	34 40.728	−20 12 49.14	X	.5313	.295
h	5.7	36 0.911	−19 43 57.87	X	.5204	.185
g	8.0	37 5.400	−21 9 8.17	X	.5568	.096
σ	6.5	39 7.712	−22 59 52.50	X	.6052	6.930
d	7.0	43 37.111	−21 40 36.19	X	+3.5761	−6.560

37 stars. Epoch 1900.5.
*Dupl. mean.

STARS FOR SATURN, 1899.

Star.	Mag.	R. A. 1900.0.	Decl. 1900.0.	Set.	Precession.	
		h m s	° ′ ″		s	″
a* . .	4.5	17 15 0.580	−21 0 20.15	XI	+3.5760	−3.911
b fol. .	8.1	17 0.980	−20 7 6.38	XI	.5538	.737
c . . .	6.5	18 43.145	−21 20 53.43	XI	.5868	.592
d . . .	7.8	22 18.296	−20 52 50.03	XI	.5759	.284
e . . .	7.8	23 49.624	−19 23 33.55	XI	.5376	.151

5 stars. Epoch 1900.5.
*Proper motion included in the reduction.
The star e is red.

STARS FOR SATURN, 1900.

Star.	Mag.	R. A. 1900.0.	Decl. 1900.0.	Set.	Precession.	
		h m s	° ′ ″		s	″
a . . .	6.4	18 1 11.472	−21 27 14.97	XII	+3.5979	+0.105
b . . .	8.3	1 41.045	−23 6 59.32	XII	.6433	.147
c . .	8.0	4 42.131	−22 15 30.92	XII	.6195	.411
d . . .	5.3	5 37.190	−23 43 17.93	XII	.6598	.491
e B. J. .	4.1	7 46.995	−21 5 6.19	XII	.5878	.681
f . . .	5.9	8 15.438	−21 44 23.52	XII	.6052	.722
g . . .	7.6	10 27.641	−23 56 3.19	XII	.6668	.915
h . . .	8.2	11 54.673	−22 22 45.79	XII	.6225	1.042
i . . .	7.2	15 59.274	−22 58 3.84	XII	.6383	.399

9 stars. Epoch 1900.5.

The last three lists were published in the Astronomische Nachrichten, No. 3867.

(5) **Comparison of 1898 and 1900.** Since 50 stars of the last three lists were observed also in 1898, it is possible to obtain the probable error of a yearly series, of four observations, from a comparison of the results.

The Fundamental places of the two are not the same, hence there is to be expected a systematic difference in the yearly results.

The full comparison gives the following:

$$\Delta\ 1900 - 1898 = +0^s.022 \quad v \pm 0^s.018 \text{ R. A.}$$
$$\Delta\ 1900 - 1898 = -0''.02 \quad v \pm 0''.29 \text{ Decl.}$$

The probable errors, deduced from the individual residuals, for the annual results, are: $\pm 0^s.011$ R. A. and $\pm 0''.17$ Decl. These are in accord with the values derived directly from this series. The 1898 series should receive greater weight, especially in Declination, for reason of the reversal of the instrument; but no distinction of weights has been made, in the comparison. No corrections for proper motion have been applied, though the interval of two years may have affected a few of the residuals.

(6) **The Separate Observations.** The observations are given in detail, in the pages following. The Latitude results are included, for the Fundamental Stars.

ι Tauri.

Date. 1900.	Circle.	R.A. 1900.0. h m s	Decl. 1900.0. ° ′ ″	Obs. φ ″
Jan. 10	W	4 57 7.019	+21 26 50.55	24.78
11		.030	50.35	24.89
12		.044	49.96	25.55
16		.056	50.25	24.96
17		.007	49.93	25.24
18		.030	49.91	24.42
19		.019	49.94	25.46
22		.053	49.94	25.48
25		.052	50.44	24.53
26		.033	50.03	25.02
31		.039	50.06	25.28
Feb. 9		.004	49.57	...
(12)		7.032	50.08	25.06
Obs. – Cat.		–.012	+0.35	

108 Tauri.

Jan. 10	W	5 9 26.967	+22 10 12.78	25.76
11		.956	13.18	25.27
12		27.055	12.78	25.94
16		.989	12.79	25.63
17		.006	12.74	25.64
18		.977	12.85	24.69
19		.976	12.94	25.67
22		.983	12.79	25.84
25		.957	13.12	25.06
26		.956	12.69	25.57
31		.970	13.09	25.46
Feb. 9		.958	12.71	...
(12)		26.979	12.87	25.50
Obs. – Cat.		+.005	–0.07	

η Tauri.

Jan. 10	W	5 13 16.052	21 59 34.55	25.99
11		.063	34.68	25.77
12		.087	34.74	25.98
16		.049	34.79	25.63
17		.064	34.90	25.48
18		.064	34.80	24.74
19		.070	35.18	25.43
22		.048	34.99	25.64
25		.029	34.86	25.32
26		.063	35.16	25.10
31		.106	35.03	25.52
Feb. 9		.083	34.73	...
(12)		16.065	34.87	25.51
Obs. – Cat.		+.005	–0.07	

ο Tauri.

Date. 1900.	Circle.	R.A. 1900.0. h m s	Decl. 1900.0. ° ′ ″	Obs. φ ″
Jan. 12	W	5 21 37.675	21 51 5.34	25.94
16		.716	5.57	25.41
22		.699	5.57	25.62
31		.717	5.49	25.62
(4)		37.702	5.49	25.65
Obs. – Cat.		–.001	–0.01	

2 Tauri.

Jan. 12	W	5 31 40.029	+21 4 53.71	25.80
16		.087	54.17	25.04
17		.057	53.83	25.34
18		.082	54.13	24.20
22		.075	53.95	25.47
25		.071	53.90	25.07
31		.085	53.63	25.71
Feb. 9		.122	54.08	...
(8)		40.076	53.92	25.23
Obs. – Cat.		+.018	+0.19	

1 Geminorum.

Jan. 10	W	5 58 2.488	+23 16 8.00	25.32
11		.509	7.60	25.43
12		.495	7.74	25.76
16		.526	7.56	25.64
17		.502	7.87	25.29
18		.481	7.70	24.62
19		.498	7.62	25.77
22		.468	7.58	25.83
25		.526	7.21	25.75
26		.518	7.50	25.54
31		.488	7.39	25.94
Feb. 9		.495	8.03	...
(12)		2.500	7.65	25.55
Obs. – Cat.		.000	–0.07	

3 Geminorum.

Jan. 10	W	6 3 39.707	+23 7 46.86	25.90
11		.672	46.83	25.84
12		.607	47.29	25.65
16		.578	46.97	25.67
17		.652	47.11	25.49
18		.641	47.08	24.68
19		.660	47.09	25.74
22		.653	47.20	25.65
25		.672	47.02	25.38
26		.667	47.56	24.92
31		.597	47.21	25.56
Feb. 9		.650	47.04	...
(12)		39.646	47.10	25.50
Obs. – Cat.		+ .001	–0.06	

η Geminorum.

Date. 1900.	Circle.	R.A. 1900.0.	Decl. 1900.0.	Obs. φ
		h m s	° ′ ″	″
Jan. 10	W	6 8 50.472	+22 32 9.14	25.85
11		.478	9.21	25.69
12		.480	9.53	25.64
16		.466	8.87	26.00
17		.475	9.23	25.60
18		.492	9.11	24.88
19		.482	9.11	25.95
22		.486	9.07	26.01
25		.462	9.06	25.57
26		.470	8.91	25.80
31		.469	9.18	25.82
Feb. 9		.434	9.48	...
(12)		50.472	9.16	25.71
Obs. – Cat.		–.011	–0.23	

κ Geminorum.

Jan. 10	W	7 38 24.713	+24 38 16.21	25.93
11		.726	16.37	25.77
12		.744	16.44	25.52
16		.677	16.87	25.50
17		.730	16.73	25.47
18		.683	17.02	24.61
19		.730	16.62	25.66
22		.728	16.53	25.54
25		.701	16.85	25.24
26		.753	16.69	25.24
31		.720	16.83	25.05
Feb. 16		.660	16.77	25.63
(12)		24.714	16.66	25.43
Obs. – Cat.		+.036	+0.20	

φ Geminorum.

Jan. 10	W	7 47 22.708	+27 1 28.41	25.83
11		.710	28.74	25.50
12		.695	28.68	25.38
16		.706	28.51	25.96
17		.681	28.62	25.68
18		.665	28.80	24.93
19		.651	28.70	25.68
22		.709	28.35	25.82
25		.717	28.65	25.54
26		.633	28.58	25.45
31		.672	28.52	25.55
Feb. 16		.672	28.86	25.64
(12)		22.685	28.62	25.58
Obs. – Cat.		–.006	+0.06	

ω_1 Cancri.

Date. 1900.	Circle.	R.A. 1900.0.	Decl. 1900.0.	Obs. φ
		h m s	° ′ ″	″
Jan. 10	W	7 54 52.830	+25 39 59.94	25.52
11		.906	59.79	25.67
17		.870	60.15	25.37
18		.887	59.93	25.02
19		.873	59.80	25.80
25		.845	59.89	25.52
26		.889	59.68	25.57
Feb. 16		.893	59.82	25.90
(8)		52.874	59.87	25.55
Obs. – Cat.		+.004	+0.09	

η Cancri.

Jan. 10	W	8 26 55.642	+20 46 51.53	25.81
11		.615	51.45	25.89
12		.630	51.51	25.65
16		.614	51.57	26.00
17		.597	51.34	26.06
18		.613	51.59	25.24
19		.634	51.57	25.91
22		.631	51.66	25.61
25		.611	51.38	25.91
26		.590	51.48	25.65
31		.598	51.38	26.18
Feb. 16		.643	51.66	25.94
(12)		55.618	51.51	25.82
Obs. – Cat.		–.011	–0.15	

γ Cancri.

Jan. 10	W	8 37 30.051	+29 49 41.42	25.51
11		29.958	41.45	25.48
12		.072	41.38	25.37
16		.042	41.53	25.63
17		.033	41.18	25.81
18		.060	41.01	25.41
19		.034	41.32	25.75
22		.025	41.53	25.33
25		.050	41.37	25.51
31		.017	41.43	25.83
Feb. 16		.003	41.30	25.89
(11)		30.031	41.36	25.59
Obs. – Cat.		–.009	+0.11	

ι Cancri.

Date. 1900.	Circle.	R.A. 1900.0. h m s	Decl. 1900.0. ° ′ ″	Obs. φ ″
Jan. 10	W	8 40 38.811	+29 7 33.06	25.51
11		.839	32.84	25.73
12		.743	32.80	25.59
16		.844	32.36	26.44
17		.839	32.59	26.04
18		.846	32.26	25.80
19		.830	32.58	26.13
22		.791	32.75	25.75
25		.833	32.47	26.05
26		.846	32.93	25.43
31		.872	32.69	26.24
Feb. 16		.881	32.17	26.66
(12)		38.831	32.63	25.95
Obs. – Cat.		–.012	–0.26	

υ Leonis.

May 17	W	11 31 49.709	–0 16 17.73	25.21
18		.661	17.97	26.44
21		.719	17.57	25.32
22		.677	18.34	26.07
24		.652	18.07	25.60
25		.695	18.27	26.30
29		.635	18.14	25.95
(7)		49.678	18.01	25.84
Obs. – Cat.		–.009	–0.10	

β Virginis.

May 17	W	11 45 29.180	+2 19 41.81	25.30
18		.175	41.18	26.92
21		.157	41.64	25.74
22		.139	41.70	25.66
24		.162	41.66	25.50
25		.163	41.91	25.75
28		.067	41.67	25.54
29		.153	41.71	25.62
(8)		29.149	41.66	25.75
Obs. – Cat.		+.007	–0.06	

b Virginis.

May 17	W	11 54 49.523	+4 12 44.26	25.34
18		.574	43.93	26.67
21		.532	44.34	25.53
22		.533	44.27	25.58
24		.566	44.07	25.58
25		.564	44.13	26.02
28		.538	44.14	25.56
29		.542	44.38	25.55
(8)		49.547	44.19	25.73
Obs. – Cat.		.000	–0.02	

η Virginis.

Date. 1900.	Circle.	R.A. 1900.0. h m s	Decl. 1900.0. ° ′ ″	Obs. φ ″
May 17	W	12 14 47.329	–0 6 39.93	25.41
18		.294	40.05	26.52
21		.325	39.75	25.50
22		.376	39.61	25.34
24		.346	39.99	25.52
25		.359	39.60	25.63
28		.333	39.85	25.43
29		.336	39.74	25.55
(8)		47.337	39.81	25.61
Obs. – Cat.		+.002	+0.10	

P XII 170.

May 17	W	12 39 3.206	–2 17 40.86	25.38
18		.196	40.66	26.17
21		.182	41.01	25.80
24		.201	40.71	25.31
25		.168	40.77	25.84
28		.259	40.89	25.51
29		.253	41.06	25.91
(7)		3.209	40.85	25.70
Obs. – Cat.		–.002	+0.02	

35 Virginis.

May 17	W	12 42 45.846	+4 7 7.26	25.68
18		.922	7.89	26.04
21		.881	7.56	25.65
22		.830	7.54	25.65
24		.909	7.51	25.48
25		.869	7.54	25.95
28		.894	7.57	25.47
29		.896	7.71	25.56
(8)		45.881	7.57	25.68
Obs. – Cat.		–.001	+0.02	

37 Virginis.

May 17	W	12 46 31.449	+3 36 1.29	25.54
18		.425	1.87	25.95
21		.448	0.99	26.11
22		.473	1.54	25.54
24		.409	1.79	25.09
25		.407	1.26	26.12
28		.458	1.50	25.43
29		.425	1.25	25.91
(8)		31.437	1.44	25.71
Obs. – Cat.		.000	.00	

83 Virginis.

Date. 1900.	Circle.	R. A. 1900.0.	Decl. 1900.0.	Obs. φ
		h m s	° ′ ″	″
May 30	W	13 39 5.953	−15 40 34.13	25.26
31		.958	34.18	24.66
June 4		.958	34.55	25.53
5		.955	34.01	24.90
17		.941	34.37	25.92
18		.947	33.95	25.79
19		.953	33.97	25.42
20		.925	34.05	25.38
(8)		5.949	34.15	25.36
Obs. − Cat.		.000	−0.01	

89 Virginis.

May 30	W	13 44 26.140	−17 38 10.27	25.29
31		.131	10.18	24.54
June 4		.165	10.19	25.06
5		.160	10.89	25.67
17		.164	9.96	25.40
18		.176	10.55	26.28
19		.148	10.04	25.38
20		.154	10.28	25.50
(8)		26.155	10.29	25.39
Obs. − Cat.		−.025	−0.04	

94 Virginis.

May 30	W	14 0 59.967	−8 24 53.08	25.48
31		.935	53.05	24.80
June 4		.924	52.62	24.87
5		.957	52.64	24.80
17		.932	52.89	25.71
18		.953	52.99	26.10
19		.948	52.89	25.61
20		.928	52.86	25.46
(8)		59.943	52.88	25.35
Obs. − Cat.		.000	−0.01	

λ Virginis.

May 30	W	14 13 41.840	−12 54 40.08	25.36
31		.823	39.30	23.93
June 17		.840	40.30	26.00
19		.853	39.98	25.58
(4)		41.839	39.92	25.22
Obs. − Cat.		−.004	+0.07	

Mayer 592.

May 30	W	14 31 40.459	−11 52 49.47	25.17
31		.440	50.07	25.12
June 4		.458	49.47	25.02
5		.408	49.28	24.74
17		.462	49.52	25.64
18		.419	49.58	25.99
19		.438	49.64	25.66
20		.470	49.60	25.50
(8)		40.444	49.58	25.36
Obs. − Cat.		.000	−0.01	

8 Librae.

Date. 1900.	Circle.	R. A. 1900.0.	Decl. 1900.0.	Obs. φ
		h m s	° ′ ″	″
May 30	W	14 45 9.219	−15 34 53.91	25.05
31		.289	54.20	24.69
June 4		.230	54.14	25.13
5		.256	54.14	25.04
17		.239	53.91	25.47
18		.240	53.90	25.75
19		.237	54.44	25.90
20		.260	54.15	25.49
(8)		9.246	54.10	25.31
Obs. − Cat.		+.026	+0.03	

ζ_1 Librae.

June 29	W	15 22 36.879	−16 22 3.58	24.50
July 2		.855	4.52	26.00
3		.845	3.94	25.23
5		.877	3.86	25.05
6		.876	3.50	24.87
9		.876	4.37	24.68
10		.864	4.07	25.74
11		.900	3.71	25.18
(8)		36.871	3.94	25.16
Obs. − Cat.		−.026	+0.55	

Librae.

June 29	W	15 29 55.829	−14 27 22.48	26.00
July 2		.772	22.05	26.13
3		.832	22.06	25.95
5		.805	21.67	25.46
6		.853	22.09	26.06
9		.867	22.04	24.95
10		.831	22.21	26.48
11		.817	22.25	26.32
(8)		55.826	22.11	25.92
Obs. − Cat.		−.001	−0.22	

κ Librae.

June 29	W	15 36 10.991	−19 21 17.15	25.52
July 2		.998	17.43	26.36
3		.964	16.72	25.46
5		.950	17.41	26.05
6		.937	17.28	26.10
9		.924	17.29	25.05
10		.931	16.78	25.90
11		.969	16.99	25.91
(8)		10.958	17.13	25.79
Obs. − Cat.		+.007	−0.09	

λ Librae.

Date. 1900.	Circle.	R.A. 1900.0. h m s	Decl. 1900.0. ° ′ ″	Obs. φ ″
June 29	W	15 47 31.623	−19 52 5.77	25.87
July 2		.591	5.26	25.94
3		.620	5.34	25.83
5		.609	5.58	25.97
6		.589	5.01	25.58
9		.616	5.18	24.69
10		.648	5.07	25.94
11		.615	5.87	26.54
(8)		31.614	5.38	25.80
Obs. − Cat.		+.007	−0.09	

24 Ophiuchi.

June 29	W	16 50 46.044	−22 59 29.27	25.14
July 2		.065	29.28	25.69
3		.031	29.12	25.58
5		.101	29.22	25.40
6		.069	29.73	26.12
9		.084	28.93	24.27
10		.045	29.73	26.45
11		.069	29.31	25.86
(8)		46.064	29.32	25.56
Obs. − Cat.		−.002	+0.22	

η Ophiuchi.

June 29	W	17 4 38.457	−15 36 4.32	25.59
July 2		.509	4.26	26.07
3		.475	4.10	25.96
5		.518	4.44	26.02
6		.527	4.19	25.98
9		.495	4.08	24.82
10		.493	4.39	26.51
11		.492	4.22	26.17
(8)		38.496	4.25	25.89
Obs. − Cat.		+.001	−0.11	

36 Ophiuchi pr.

June 29	W	17 9 11.800	−26 27 22.22	25.30
July 2		.777	22.01	25.63
3		.835	22.75	26.42
5		.751	22.39	25.78
6		.757	22.70	26.30
9		.760	22.61	25.16
10		.825	22.14	26.08
11		.770	21.97	25.73
(8)		11.784	22.35	25.80
Obs. − Cat.		+.001	−0.02	

ξ Ophiuchi.

June 29	W	17 15 0.604	−21 0 20.02	25.31
July 2		.602	20.03	25.85
3		.549	20.02	26.12
5		.589	20.02	25.66
6		.573	19.97	25.86
9		.550	20.19	25.03
10		.573	20.08	26.32
11		.600	20.89	26.99
(8)		0.580	20.15	25.89
Obs. − Cat.		+.013	−0.03	

C_2 Ophiuchi.

June 29	W	17 25 18.849	−23 53 7.62	25.58
July 2		.837	7.24	25.91
3		.800	7.23	26.20
5		.834	7.41	25.55
6		.806	7.71	26.35
9		.808	7.62	25.20
10		.814	7.55	26.21
11		.812	7.75	26.44
(8)		18.820	7.52	25.93
Obs. − Cat.		+.033	−0.03	

X Sagittarii.

June 29	W	17 41 15.917	−27 47 33.87	25.34
July 2		.948	33.57	25.66
3		.941	33.72	26.10
5		.910	34.01	25.74
6		.920	33.48	25.59
9		.929	34.19	25.24
10		.918	34.13	26.43
11		.921	34.04	26.28
(8)		15.926	33.88	25.80
Obs. − Cat.		−.004	+0.08	

Mayer 722.

June 29	W	17 50 2.039	−18 47 4.43	25.77
July 2		1.985	4.77	26.73
3		.038	4.89	27.14
5		.995	4.33	25.93
6		.016	4.21	26.19
9		.044	4.34	25.26
10		.012	4.21	26.38
11		.019	4.16	26.27
(8)		2.019	4.42	26.21
Obs. − Cat.		−.005	−0.33	

λ Sagittarii.

Date. 1900.	Circle.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″	Obs. φ ″
June 29	W	18 21 47.910	−25 28 37.69	25.35
July 2		.967	37.86	26.23
3		.917	38.03	26.70
5		.972	37.66	25.50
6		.976	37.89	26.23
9		.924	37.41	24.69
10		.923	37.70	26.06
11		.949	37.19	25.58
(8)		47.942	37.68	25.79
Obs. − Cat.		−.009	+0.11	

Br. 2335.

Date. 1900.	Circle.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″	Obs. φ ″
June 29	W	18 32 55.576	−21 8 4.80	25.19
July 2		.566	5.15	26.25
3		.611	4.78	26.18
5		.591	4.87	25.44
6		.598	5.23	26.30
9		.595	4.96	24.97
10		.621	4.57	25.66
11		.578	5.27	26.39
(8)		55.592	4.95	25.80
Obs. − Cat.		−.007	+0.11	

Observations of Zodiacal Stars.

First List.

b

Date. 1900.	Cir.	R. A. 1900.0. h m s	Decl. 1900 0. ° ′ ″
Jan. 10	W	5 19 13.708	+20 29 32.60
11		.712	32.53
19		.747	32.56
26		.736	32.60
		13.726	32.57

c

Date. 1900.	Cir.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Jan. 12	W	5 21 37.675	+21 51 5.34
16		.716	5.57
22		.699	5.57
31		.717	5.49
		37.702	5.49

d

Date. 1900.	Cir.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Jan. 17	W	5 21 51.332	+23 12 33.80
18		.392	33.56
25		.352	34.31
Feb. 9		.426	34.28
		51.376	33.99

e

Date. 1900.	Cir.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Jan. 10	W	5 24 8.811	+21 18 4.96
11		.778	4.85
19		.815	5.12
26		.828	5.69
		8.808	5.16

f

Date. 1900.	Cir.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Jan. 12	W	5 27 42.160	+20 24 12.12
16		.194	11.95
22		.176	11.79
31		.130	12.10
		42.165	11.99

g

Date. 1900.	Cir.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Jan. 10	W	5 28 53.830	+22 30 3.63
11		.793	3.17
19		.837	3.53
26		.762	3.69
		53.806	3.50

h

Date. 1900.	Cir.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Jan. 12	W	5 31 40.029	+21 4 53.71
16		.087	54.17
17		.057	53.83
18		.082	54.13
22		.075	53.95
25		.071	53.90
31		.085	53.63
Feb. 9		.122	54.08
		40.076	53.92

i

Date. 1900.	Cir.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Jan. 10	W	5 36 1.231	+22 36 36.18
11		.215	36.16
19		.251	36.92
26		.201	36.42
		1.224	36.42

k

Date. 1900.	Cir.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Jan. 12	W	5 37 15.108	+23 9 25.00
16		.160	24.84
22		.133	24.99
31		.137	24.90
		15.134	24.93

l

Date. 1900.	Cir.	R. A. 1900 o. h m s	Decl. 1900.0. ° ′ ″
Jan. 17	W	5 37 22.502	+21 22 8.85
18		.478	8.98
25		.552	8.68
Feb. 9		.470	9.02
		22.500	8.88

m

Date. 1900.	Cir.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Jan. 10	W	5 41 12.596	+22 29 28.01
11		.576	27.77
19		.621	28.03
26		.610	28.14
		12.601	27.99

n

Date. 1900.	Cir.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Jan. 12	W	5 41 40.283	+20 54 16.41
16		.307	16.24
22		.332	16.16
31		.298	16.05
		40.305	16.21

o

Date. 1900.	Cir.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Jan. 10	W	5 45 45.772	+23 21 22.03
11		.803	21.66
19		.782	22.18
26		.763	21.75
		45.780	21.90

p

Date. 1900.	Cir.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Jan. 12	W	5 47 18.141	+22 3 2.77
16		.147	2.60
22		.164	2.19
31		.070	2.22
		18.130	2.44

v

Date. 1900.	Cir.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Jan. 17	W	5 48 27.651	+20 15 27.82
18		.646	27.56
25		.631	27.78
Feb. 9		.691	27.62
		27.655	27.69

q

Jan. 10	W	5 52 57.707	+20 40 1.37
11		.665	1.05
19		.671	1.10
26		.639	0.67
		57.670	1.05

r

Jan. 12	W	5 53 39.351	+21 35 47.83
16		.329	47.57
22		.372	47.61
31		.370	47.30
		39.356	47.58

s

Jan. 17	W	5 54 24.501	+22 53 37.97
18		.491	37.69
25		.508	37.65
Feb. 9		.519	37.93
		24.505	37.81

t

Jan. 10	W	5 58 2.488	+23 16 8.00
11		.509	7.60
12		.495	7.74
16		.526	7.56
17		.502	7.87
18		.481	7.70
19		.498	7.62
22		.468	7.58
25		.526	7.21
26		.518	7.50
31		.488	7.39
Feb. 9		.495	8.03
		2.500	7.65

Second List.

a

Jan. 10	W	7 54 52.830	+25 39 59.94
11		.906	59.79
17		.870	60.15
18		.887	59.93
19		.873	59.80
25		.845	59.89
26		.889	59.68
Feb. 16		.893	59.82
		52.874	59.87

b

Date. 1900.	Cir.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Jan. 12	W	7 55 2.521	+23 51 28.78
16		.572	28.85
22		.589	28.59
31		.530	28.69
		2.553	28.73

e

Jan. 17	W	8 1 52.49	+24 18 27.47
18		.538	27.18
25		.550	27.06
Feb. 16		.551	27.16
		52.532	27.22

c

Jan. 10	W	8 2 5.961	+25 0 16.12
11		.912	15.73
19		.968	16.09
26		.886	15.63
		5.932	15.89

d

Jan. 12	W	8 2 18.039	+25 50 33.28
16		.035	33.88
22		.077	33.97
31		.038	34.22
		18.047	33.84

f

Jan. 17	W	8 4 25.873	+25 48 39.20
18		.863	39.00
25		.938	38.81
Feb. 16		.888	39.19
		25.890	39.05

g

Jan. 10	W	8 7 46.295	+23 26 19.69
11		.279	19.16
19		.279	18.90
26		.221	19.24
		46.268	19.25

h

Jan. 12	W	8 8 44.278	+25 2 16.11
16		.283	16.66
22		.266	15.96
31		.286	17.26
		44.278	16.50

k

Date. 1900.	Cir.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Jan. 10	W	8 14 35.462	+24 20 14.90
11		.439	14.71
19		.534	14.47
26		.428	14.53
		35.466	14.65

i

Jan. 12	W	8 14 41.221	+25 39 4.76
16		.225	5.17
22		.223	4.85
31		.233	5.88
		41.226	5.16

l

Jan. 17	W	8 15 56.958	+23 16 12.36
18		.981	12.08
25		57.001	12.12
Feb. 16		.964	12.25
		56.976	12.20

m

Jan. 10	W	8 20 43.009	+24 51 46.44
11		.036	46.66
19		.102	46.64
26		.023	46.95
		43.042	46.67

n

Jan. 12	W	8 21 31.928	+23 28 50.40
16		.959	50.03
22		.973	50.22
31		.975	50.00
		31.959	50.16

Third List.

a

May 17	W	12 14 47.329	−0 6 39.93
18		.294	40.05
21		.325	39.75
22		.376	39.61
24		.346	39.99
25		.359	39.60
28		.333	39.85
29		.336	37.74
		47.337	39.81

b

Date. 1900.	Cir.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
May 17	W	12 20 10.814	−0 30 57.54
18		.801	57.95
24		.819	57.46
28		.716	57.60
Mag. 9		10.787	57.64

c

May 21	W	12 21 38.815	+0 22 12.73
22		.803	13.21
25		.841	13.28
29		.861	12.59
Mag. 7⅜		38.830	12.95

d

May 17	W	12 24 1.888	−1 52 35.29
18		.959	35.35
24		.946	35.21
28		.921	35.28
Mag. 7¼		1.929	35.28

e

May 21	W	12 24 15.302	−0 40 47.80
22		.380	47.90
25		.354	48.16
29		.303	48.11
Mag. 8¼		15.335	47.99

f

May 17	W	12 27 52.096	+0 16 37.03
18		.148	37.32
24		.142	37.17
28		.101	36.58
Mag. 8¼		52.122	37.02

g

May 21	W	12 29 15.684	−0 51 23.57
22		.701	23.36
25		.727	23.40
29		.675	23.55
Mag. 7		15.697	23.47

h

May 17	W	12 31 57.738	−1 46 3.00
18		.757	2.97
24		.760	2.90
28		.756	3.07
Mag. 7		57.753	2.98

Fourth List.

a

Date. 1900.	Cir.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
May 30	W	14 8 20.647	−11 22 11.47
31		.667	11.06
June 17		.708	11.03
19		.643	11.19
Mag. 7½		20.666	11.19

b

June 4	W	14 13 26.188	−11 36 5.61
5		.246	5.69
18		.231	6.07
20		.255	6.07
Mag. 7½		26.230	5.86

c

May 30	W	14 13 41.840	−12 54 40.08
31		.823	39.30
June 17		.840	40.30
19		.853	39.98
		41.839	39.92

d

June 4	W	14 18 2.621	−11 15 26.84
5		.591	27.09
18		.679	27.28
20		.717	26.82
Mag. 6½		2.652	27.01

e

May 30	W	14 18 24.251	−12 29 12.43
31		.299	12.37
June 17		.229	12.35
19		.229	12.09
Mag. 7¾		24.252	12.31

f

June 4	W	14 19 18.251	−11 12 56.64
5		.185	56.62
18		.300	57.09
20		.240	56.76
Mag. 6½		18.244	56.78

g

May 30	W	14 22 19.929	−12 54 35.96
31		.898	35.73
June 17		.936	36.04
19		.903	35.37
Mag. 6¾		19.916	35.78

Fifth List.

η

Date. 1900.	Cir.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
June 29	W	15 47 31.623	−19 52 5.77
July 2		.591	5.26
3		.620	5.34
5		.609	5.58
6		.589	5.01
9		.616	5.18
10		.648	5.07
11		.615	5.87
		31.614	5.38

ζ

July 2	W	15 49 13.559	−19 5 15.55
3		.505	15.86
5		.482	16.28
6		.525	16.10
Mag. 6.4		13.518	15.95

ε

July 2	W	15 51 20.841	−21 11 42.32
3		.913	41.78
5		.861	42.31
6		.841	42.30
Mag. 7		20.864	42.18

δ

July 2	W	15 53 19.367	−19 39 5.86
3		.359	5.66
5		.305	6.26
6		.292	6.35
Mag. 8.4		19.331	6.03

γ

June 29	W	15 55 14.323	−20 52 23.37
July 9		.398	22.33
10		.375	22.68
11		.357	22.17
Mag. 7.1		14.363	22.64

β

July 2	W	15 57 18.373	−19 33 45.10
3		.315	45.16
5		.297	45.31
6		.296	45.16
		18.320	45.18

α

July 2	W	15 59 37.291	−19 31 54.41
3		.262	54.19
5		.186	55.00
6		.243	54.45
		37.246	54.51
Obs.—Auwers B. J.		+.020	+0.69

z

Date. 1900.	Cir.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
June 29	W	15 59 49.733	− 21 33 56.87
July 9		.777	56.91
10		.683	56.24
11		.708	56.53
Mag. 7.5		49.725	56.64

y

July 2	W	16 0 57.386	− 20 23 54.15
3		.363	54.39
5		.317	54.21
6		.383	54.15
Mag. 5		57.362	54.22

x

June 29	W	16 1 32.300	− 20 35 55.64
July 9		.339	. . .
10		.369	54.99
11		.330	55.15
Mag. 5		32.334	55.26

w

June 29	W	16 6 10.936	− 19 12 3.13
July 9		.899	2.80
10		.953	2.74
11		.913	3.40
Mag. 5		10.925	3.02

v

July 2	W	16 7 47.585	− 21 8 40.90
3		.628	41.27
5		.618	41.26
6		.639	41.07
Mag. 6.9		47.619	41.12

u

July 2	W	16 8 52.977	− 18 16 43.84
3		.959	44.20
5		.898	44.03
9		.911	43.98
Mag. 6.5		52.936	44.01

μ

June 29	W	16 8 57.388	− 22 7 36.96
July 9		.422	36.82
10		.300	36.58
11		.354	37.57
Mag. 7.4		57.366	36.98

t

July 2	W	16 11 8.467	− 19 51 19.64
3		.416	20.24
5		.397	20.35
6		.368	19.88
Mag. 6.4		8.412	20.03

s

Date. 1900.	Cir.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
June 29	W	16 13 16.196	− 19 58 26.98
July 9		.276	27.12
10		.250	26.54
11		.274	27.27
Mag. 6.2		16.249	26.98

τ

July 2	W	16 14 41.600	− 18 26 57.86
3		.560	58.31
5		.598	58.51
6		.582	58.68
Mag. 7.9		41.585	58.34

ν

June 29	W	16 14 47.919	− 21 36 0.76
July 9		.887	1.05
10		.836	1.19
11		.867	1.81
Mag. 6.6		47.877	1.20

ξ

July 2	W	16 16 53.078	− 22 52 57.66
3		.111	57.93
5		.075	57.29
6		.078	57.22
Mag. 7.4		53.086	57.52

1″.1 dup. *mean.*

q

June 29	W	16 18 15.022	− 19 48 11.76
July 9		14.984	12.32
10		.967	12.08
11		.968	12.13
Mag. 4.3		14.985	12.07

λ

July 2	W	16 19 35.831	− 19 36 23.28
3		.865	24.15
5		.859	24.20
6		.801	23.94
Mag. 8.5		35.839	23.89

p

June 29	W	16 21 13.631	− 18 13 46.25
July 9		.607	46.33
10		.607	46.03
11		.629	46.56
Mag. 5		13.619	46.29

o

Date. 1900.	Cir.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
July 2	W	16 21 18.179	− 21 53 33.59
3		.167	33.66
5		.182	33.52
6		.117	33.33
Mag. 7.4		18.161	33.52

π

July 2	W	16 23 24.441	− 21 20 50.87
3		.485	51.41
5		.493	51.12
6		.507	51.42
Mag. 7.7		24.481	51.20

θ

June 29	W	16 23 54.065	− 18 27 14.82
July 9		.040	15.11
10		.040	14.81
11		.069	14.92
Mag. 8.0		54.053	14.91

n

July 2	W	16 26 12.426	− 21 15 9.05
3		.498	8.28
5		.469	9.08
6		.449	8.77
Mag. 5		12.460	8.80

κ

June 29	W	16 26 32.303	− 20 32 16.67
July 9		.256	16.84
10		.246	16.31
11		.227	16.25
Mag. 8.3		32.258	16.52

m

July 2	W	16 28 55.462	− 19 43 54.92
3		.475	55.35
5		.481	55.67
6		.473	54.95
Mag. 8.4		55.473	55.22

l

June 29	W	16 29 41.284	− 18 27 56.92
July 9		.312	56.34
10		.263	55.93
11		.221	56.32
Mag. 8.5		41.270	56.38

k

Date. 1900.	Cir.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
July 3	W	16 31 41.162	− 21 51 10.78
5		.174	10.94
6		.161	10.45
Mag. 8.3		41.166	10.72

ρ

June 29	W	16 32 19.730	− 22 41 24.73
July 9		.702	25.38
10		.691	25.53
11		.736	25.88
Mag. 7.0		19.715	25.38

ω

July 2	W	16 32 45.226	− 18 37 30.78
3		.192	30.29
5		.222	30.71
6		.153	30.37
Mag. 6.9		45.198	30.54

i

July 2	W	16 34 40.764	− 20 12 48.98
3		.698	49.35
5		.733	48.97
6		.717	49.25
Mag. 6.5		40.728	49.14

h

June 29	W	16 36 0.941	− 19 43 57.45
July 9		.944	58.01
10		.871	58.17
11		.889	57.85
Mag. 5.5		0.911	57.87

g

July 2	W	16 37 5.431	− 21 9 7.81
3		.423	8.43
5		.379	8.34
6		.367	8.08
Mag. 8.1		5.400	8.17

σ

July 2	W	16 39 7.748	− 22 59 52.46
3		.724	52.78
5		.696	52.43
6		.681	52.31
Mag. 6.7		7.712	52.50

d

July 2	W	16 43 37.108	− 21 40 36.03
3		.132	36.26
5		.107	36.11
6		.097	36.37
Mag. 7.0		37.111	36.19

Sixth List.

a

Date. 1900.	Cir.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
June 29	W	17 15 0.604	− 21 0 20.02
July 2		.602	20.03
3		.549	20.02
5		.589	20.02
6		.573	19.97
9		.550	20.19
10		.573	20.08
11		.600	20.89
		0.580	20.15

b

July 2	W	17 17 0.952	− 20 7 6.35
3		1.025	6.37
5		.987	6.26
9		.954	6.52
Mag. 7.7		0.980	6.38

c

June 29	W	17 18 43.127	− 21 20 53.81
July 9		.178	53.35
10		.160	52.74
11		.115	53.81
Mag. 6.0		43.145	53.43

d

June 29	W	17 22 18.328	− 20 52 50.06
July 9		.266	50.21
10		.290	49.59
11		.298	50.25
Mag. 7.6		18.296	50.03

e

July 2	W	17 23 49.636	− 19 23 33.44
3		.644	33.53
5		.610	33.73
6		.605	33.49
Mag. 7.6 red.		49.624	33.55

Seventh List.

a

June 29	W	18 1 11.483	− 21 27 15.12
July 9		.484	15.12
10		.428	14.63
11		.495	14.99
Mag. 6.1		11.472	14.97

b

July 2	W	18 1 41.008	− 23 6 59.01
3		.063	59.10
5		.071	59.51
6		.038	59.68
Mag. 8.0		41.045	59.32

c

Date. 1900.	Cir.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
June 29	W	18 4 42.093	− 22 15 30.74
July 9		.156	30.90
10		.159	30.69
11		.118	31.35
Mag. 7.7		42.131	30.92

d

July 2	W	18 5 37.160	− 23 43 17.95
3		.188	18.09
5		.215	18.07
6		.197	17.62
Mag. 5.0		37.190	17.93

e

July 2	W	18 7 46.976	− 21 5 6.59
3		.977	5.58
5		47.027	6.53
6		.000	6.07
Mag. 4		46.995	6.19
Obs.–Auwers B. J.		+.054	+0.55

f

June 29	W	18 8 15.445	− 21 44 23.62
July 9		.443	23.64
10		.412	23.28
11		.451	23.55
Mag. 5.8		15.438	23.52

g

July 2	W	18 10 27.614	− 23 56 3.07
3		.636	3.27
5		.706	3.16
6		.609	3.24
Mag. 7.5		27.641	3.19

h

June 29	W	18 11 54.626	− 22 22 45.54
July 9		.693	46.13
10		.676	45.78
11		.698	45.72
Mag. 8.0		54.673	45.79

i

July 2	W	18 15 59.270	− 22 58 3.25
3		.246	3.68
5		.331	4.30
6		.247	4.13
Mag. 7.5		59.274	3.84

THE PIAZZI STARS.

(1) **The List.** This list includes all of the Southern stars of the catalogue observed by GUISEPPE PIAZZI, at Palermo, during the period from 1792 to 1813, and published in the completed form in 1814.

Such stars as have been changed in Declination, from North to South of the Equator, by the effect of Precession, in the interval since his observations, have not been included. On the other hand, a number of his Southern stars have now North Declination, and these will be found in the catalogue following.

There are 3088 stars in the list specified. These have been determined here, with two observations each; while many of them, used as Fundamentals, have received a larger number of determinations.

The catalogue of PIAZZI includes stars below $-46°$ Declination. This is beyond the limit of reliable and satisfactory observation, at this Latitude; but all of his stars have been retained, for the sake of completeness, and because the observation of these stars will contribute to the study of the Refraction correction, and to the discussion of the errors at large zenith distances. For the determination of the places of standard Ephemeris stars, in Vol. IV, L. O., the limit was set at $-40°$ Declination. In general, satisfactory observations are to be obtained below that point, under good conditions here, perhaps to $-43°$ or $-44°$; but the Declination at the extreme limits of this list can not be considered to be precise. The largest South Declinations are $46°.8$, giving a zenith distance here of $84°.2$. Since the Latitude of Palermo is greater than that of Mount Hamilton, the original determinations of PIAZZI must have errors of considerable amount.

The observations were obtained here, in the periods: September, 1898, to April, 1899; July to September, 1899; and April to June, 1900, inclusive. In all, fourteen calendar months were used, April and September having been twice included. The total number of nights required to complete the list, as programmed, was 140, an average of 10 per month; but on account of interruptions from clouds, and other incidents, six nights additional were utilized in part.

There have been made very closely 6800 observations, upon the stars of this list; while the inclusion of Circumpolar stars, and of Nadirs, observed with the list, brings the total to above 7600 observations. A few extra stars have been determined during the progress of the work, some because they were close to PIAZZI stars, and some for proper motion. These number 25, and are included in the following catalogue, in their order.

The circle microscopes were read by Dr. R. T. CRAWFORD on 72 nights, in which over 4400 observations were made. Thus three fifths of the total number of observations were secured on slightly more than one half the nights, with the assistance of a microscope reader. This perhaps represents fairly the gain in speed, and consequent economy of time. The average number of observations per night, usually from four to five hours in length, was 61 with a microscope reader, and the maximum number was 86. Observing alone the average was 46, and the maximum 69. In practice the complete observation of a Southern star is made in three minutes alone, or in two minutes with the assistance of a microscope reader. But the arrangement of the stars of a list does not usually permit such speed to be maintained; so that the maximum number of observations per hour alone appears to be 18; and 21 were often secured with assistance. In clearing up condensed groups of stars, assistance is of especial advantage, however, and the circle readings can be made in advance of the transit of the star with perfect safety, leaving the actual setting to be made with the Declination micrometer, while the assistant checks the microscope reading. On the other hand, assistance by the graduate students, holding fellowships at the Observatory, has usually only been available during the summer months, when the best conditions prevail; and for the winter, when there is a proportionally small number of good nights, the work must be planned for a single observer.

While there is economy of observing time, and of consequent time of reduction, in the use of an assistant, there is no essential shortening of the period required to complete a piece of work, when the assistance is not continuous. The seasons, covered by this set of observations, were above the average in quality, and it was possible to complete the part of the sky which is under observation in winter, along with the part which can be secured in summer, with considerable time to spare in the latter season.

The distribution of the stars in Right Ascension is quite unequal, the number per hour ranging in the catalogue for 1900 from 69 for 1^h, to 213 for 20^h, the average being 129. While some of the hours have been completed in ten nights, the most extensive have required more than thirty. The largest number of stars in a single minute of Right Ascension is nine, but an interval of one minute sometimes includes ten.

Throughout the work the practice has been to observe eight Fundamental stars, for four hours of continuous observations of the list. For longer observing periods, the same average, two per hour, has been maintained. Two Nadirs and two pairs of Circumpolar stars have been observed each full night, and the Mire has been read two or three times.

Collimation has been measured, on the average, once for each pair of nights upon the same program of stars.

The clock rate has been derived from each full night's work; but the daily rate, indicated by the successive nights, has usually been taken into consideration in adopting an hourly rate for the period of observing.

One division of the circle has been read under each microscope.

No correction for Flexure has been applied during this series of observations. The value of 0".1 for the semi-horizontal flexure was used in the reduction of the observations of Vol. IV, L. O.; but succeeding measures indicate that the error, due to this source, is even less than the value adopted during the first years of observation.

The original observations, made by PIAZZI, are to be reduced anew by Dr. HERMAN S. DAVIS. The improvement in the places of the catalogue, to be anticipated as the result of this extensive labor, will add greatly to its value as the foundation at an early epoch, for discussion of the Precession, and of proper motions. It appeared advisable to secure observations of the complete list at the end of the century, near the beginning of which the list was first determined. And it was at the suggestion of Dr. DAVIS, that this portion of the observing was undertaken here.

In the meantime, all of the PIAZZI stars had been observed by TAYLOR, at Madras, in the years 1831 to 1837, for the mean epoch 1835. These observations have been newly reduced by Mr. A. M. W. DOWNING, of the English Nautical Almanac Office, and the completed catalogue has been published.

The Cordoba General Catalogue contains the places of the Southern stars of PIAZZI, with but very few exceptions, for the epoch 1875, based upon observations during the period 1872 to 1880.

The Northern stars will fall within the scope of the Astronomische Gesellschaft zones, for which the epoch of reduction is also 1875. With the reobservation of these Northern stars by Prof. PORTER, of the Cincinnati Observatory, at the present time, there will be available observations of the complete list of stars, for the four epochs:

1800 1835 1875 1900.

My own long connection with work in the Southern hemisphere, at the Argentine National Observatory, has given the plan of observing these Southern stars some features of special interest. And the Lick Observatory is in general favored with observing conditions, that would make it as feasible to reach these Southern limits, as for any of the Northern observatories.

A large proportion of the stars observed by PIAZZI are contained in our present list of Fundamental stars. The Fundamental A. G. System of Dr. AUWERS includes 129, only Southern stars being here enumerated. Of the list of 303, selected for the extension of the A. G. Zones to the South, 253 are found in PIAZZI.

In the new Fundamental Catalogue of 480 stars below $-20°$ Decl., by Dr. AUWERS, there are 234 observed by PIAZZI.

In Prof. NEWCOMB'S Fundamental Catalogue for 1900, there are in all 327. And in the new list of Prof. BOSS, of Standard Stars below $-20°$, there are 80.

These brighter stars have been, for the greater part, well and regularly observed, for a long period. The identity of so large numbers of stars furnishes the material for the comparison and discussion of the Fundamental systems. The new observations serve to bind together the whole list.

There are also many faint stars, observed by PIAZZI, which have since received but little attention, and have some of them only been observed at the four epochs mentioned above. These faint stars may be expected to furnish some data for the evidence of the motion of the solar system. Some of the best discussions of that component of proper motion have been based upon the faint classes of stars, since these are less likely to possess large individual proper motion. With the new reductions of PIAZZI and of TAYLOR, there will be a century of proper motion exhibited, with two intervening epochs, 1835 and 1875. The faintest star of PIAZZI, estimated here, is 9¼ magnitude. There are a considerable number between magnitudes 8 and 9. The original estimates of PIAZZI do not conform to the present scale, for the fainter stars. In the neighborhood of magnitudes 5 and 6, there is not much difference; but his estimates of the fainter classes fall off rapidly, and the stars of magnitudes 8 to 9 are estimated on a scale below the reach of meridian observers.

The reduction of these observations was completed in 1901, having been several times suspended by the pressure of other work. For instance, the reduction of the Reference stars for Eros required some six months, and the current interest in the results would seem to have demanded their prompt issue.

Material assistance has been furnished in the reductions, at various times, by Messrs. CODDINGTON, CRAWFORD, DALL, STEBBINS, and CURTISS. Their work has included the approximate reduction of the PIAZZI Catalogue, for a working list; the computation of apparent to mean place reduction; and the computation of the Precessions for 1900. Mr. PALMER has assisted in the preparation of this publication. In all, the help received has amounted to nine months' full time of one computer. Including the fourteen months of observing, during which the first stages of the reductions are carried on, I have given enough time to the reductions to bring the total up to three years' total computation.

The estimate, made in Volume IV, of two thousand to three thousand observations per year, as being within the scope of one observer, unaided in the reduction, seems to be confirmed by later experience.

(2) **The Fundamental System.** The stars used as Fundamental, in the observation and reduction of this list, are all included in the list itself. They are well distributed down to 25° South Declination, and a considerable number are found as far South as 31°. All are contained in lists of the *Berliner Jahrbuch*,

either in the main Ephemeris, or in the list of 303 stars at the close. The places, as there given, have been corrected by the quantities for their betterment, published by Dr. AUWERS, in the Astronomische Nachrichten, Nos. 3508–09 and 3511.

In this note of introduction the new, or corrected places, will be referred to simply as B. J. and 303.

There are 129 stars from B. J., of which 105 are also included in 303. The last has, in addition, 148 stars which are not in B. J. Thus there are 277 stars in all. The reduction of the places of stars which are included in both lists, from one system to the other, is given in A. N. 3511. The Right Ascensions are identical. The Declinations of the B. J. require the correction, $+0''.15 - 0''.015\ \delta°$, to reduce them to the Declinations of 303.

This systematic difference in Declination would amount to $0''.62$ at the lower limit of B. J. Since this list has greater extension than 303, all of its stars have been included. In making the final reduction, the systematic difference has been derived from the observations of Latitude made here, using the Declinations of B. J. for all the stars contained in that list, and the Declinations of 303 for stars which are not in B. J. The results of this comparison are given in Table VI of this introduction.

The two lists of Fundamental stars are kept separate, and the detailed comparisons of Ephemeris with observation, are given in Tables III and IV.

For the mean of the zone of Fundamental stars, the correction $+0''.40$ has been applied to the Declinations of B. J. throughout, and the system employed is assumed to be that of AUWERS' corrected 303. This differs from the original list of 303 by $-0''.38$ in Declination, for the stars employed. The systematic difference of the original list, from B. J., is given in the Jahrbuch as: $+0''.50 - 0''.02\ \delta°$.

The observations of the Fundamental stars must necessarily reproduce the adopted places of these stars, for the mean of all the determinations. The mean by stars, giving the same weight to each star, may differ slightly from the mean weighted according to the number of observations. The variation of the observed places, through the zone of Fundamental stars, is indicated in Table V, following the detailed results.

For the extension of this series of determinations, beyond the zone of Fundamental stars, comparison with existing places of Standard stars will furnish a series of tests. In the following portions of this introduction will be found the results of comparisons, made with NEWCOMB'S Fundamental Catalogue, AUWERS' Catalogue south of $-20°$, BOSS for the same limit, and finally with the extensive catalogue of Cordoba.

The comparison of the places of the stars, used here as fundamental, furnishes a basis for the systematic difference of the authorities. The result may not agree

with that derived from a comprehensive comparison of all the stars common to both authorities; but the difference, derived from the stars actually employed, is more nearly the one appropriate to the needs of this case. It represents the correction to the observed places, which would have been obtained by the use of another authority for the Fundamental stars.

Aside from comparison with the Standard Catalogue, the observations of the Circumpolar stars serve as a check upon the system of Declinations. The Latitude derived from stars observed at both culminations is free from any error in the assumed Declination. The Variation of Latitude will enter into the results; but for a list of stars observed throughout the year, and in all Right Ascensions, this factor is nearly eliminated naturally, and its effect can be quite precisely corrected, by the formula for the Variation.

The influence of Refraction, however, is important, affecting the Latitudes, from stars North and South of the zenith, with opposite signs.

The comparison with the Southern B. J. stars confirms the statement in Volume IV, page 21, of the first meridian circle work published here, that the Poulkova Refractions satisfy the observed zenith distances of the Circumpolar stars, and those of the B. J. system, quite precisely. The comparison with the system of 303 leaves a considerable difference to be accounted for. That with other standards exhibits a similar difference.

It is evident that, through the fundamental zone, the differences due to Refraction will not be large enough to be apparent, and that whatever system of Declinations be used, the observations should represent the system, within errors not greatly exceeding those of observation. The derived Latitudes are combined in groups of 5°, both North and South of the zenith, in Tables VI and IX, to exhibit any change with zenith distance. The difference between Latitudes derived from the Circumpolar stars, observed at both culminations, and the Latitudes from South stars, must be due to systematic errors in the Declinations of these last, or to errors of observation, including Refraction as part of the reduction of the observations.

With the use of the Poulkova Refractions we should obtain the Latitude 37° 20′ 25″.39 from the Circumpolar stars observed at both culminations, during this series. The observations of Latitude from the B. J. Southern stars would indicate a mean correction of −0″.16 for its system of Declinations, down to −31°. The Latitude observations of the list of 303 would indicate a correction of −0″.56 for its Declination system down to −25°. Employing NEWCOMB'S Declinations down to −31°, the indicated correction would be −0″.68. Employing the Declinations of BOSS, for the Standard stars −20° to −31°, the correction to his system would be −0″.72. Similarly for AUWERS' Southern Fundamental Catalogue, −20° to −31°, the correction would be −0″.92.

The evidence points strongly toward a decrease in the Poulkova Refractions, for this place, if the standard systems above enumerated are to be reconciled with the observations made here. The differences increase proportionally, as Declinations, below the limits above, are used for the derivation of Latitude.

(3) **The Refraction.** It is unquestionably desirable that an investigation of the Refraction should be made at every observatory, where work of precision is taken in hand, and the subject has been often under consideration here. But without observing a special series of stars for the purpose, a piece of work like the present one, which includes the observation of the Circumpolar stars, and standard stars of large zenith distance South, can be made to furnish a contribution of some weight toward the solution of the problem. The zenith distances extend to 73° North, for the lower culminations; and to 84° South, for extreme cases. The errors of observation, however, are large for the extreme cases, and a more reliable value of the constant is probably to be found, by limiting the determinations to stars not exceeding 81° zenith distance.

An approximation to the solution of the problem may be reached, by determining the corrections to the Refractions already in use, and by seeking the best adjustment of observation with the empirical values adopted in practice. It appears to be necessary to adopt some system of Declinations as standard, although it is not to be assumed that any system, yet devised, is free from error. In fact, some of the error is due to the factor which is the object of research. While the uncertainty of the Refraction affects the observation of the place of a star near the zenith, by a small amount only; if the Latitude of the place of observation has been determined by observations of Circumpolar stars, in the usual manner, there is introduced a constant error in all the Declinations, if an erroneous refraction constant has been employed.

It has been generally conceded that the Refractions of BESSEL are too large, in modern practice. They have been so generally used, that we may expect the influence of an error in BESSEL'S constant to enter as a systematic error in all Declinations, which have to depend upon observations made within a restricted range of Latitude. It would appear that our best determinations of Southern stars of large Declination are liable to this constant error. For we should find that all the observatories in the Southern hemisphere, that have contributed results of importance, lie within a range of about 10° of Latitude; or approximately 58° from the South Pole.

A comparison of observations made upon stars of various zenith distances, by two observatories situated on opposite sides of the Equator, furnishes the best differential determination of the Refraction. Such comparisons as have been made are the basis of the derived decrease of BESSEL'S Refractions.

The Poulkova Refractions are smaller then BESSEL'S; and while there is high class of evidence, that the best value for the location of some meridian circles may lie between the two, for this Observatory it is quite certain that the Poulkova Refractions must be still further diminished.

The approximate method of testing this conclusion has been already outlined. In Table I, which follows, are given the results of a comparison of the Latitudes derived from the observations of the Circumpolar stars at both culminations, and the Latitudes derived from Southern stars, using the Declinations of the various authorities cited. The results are given in the form of a proportional reduction of the so-called Constant of Refraction of the Poulkova Tables. The value of μ varies, in the Poulkova Tables, according to empirical data, and the tabular values indicate how nearly the variation is confirmed by this series of observations.

The first part of Table I gives the decrease in the constant, assuming it to be distributed on both sides of the zenith, between a point absolutely determined by the combination of the Circumpolar observations, and a point within a zone of Southern stars, fixed by the Declinations of each authority.

It is probable that the B. J. system requires a plus correction to the Declinations.

For 303, and NEWCOMB, we have a zone stretching from the Equator to $-25°$, and $-30°$, respectively. For the three standard lists, NEWCOMB, BOSS, and AUWERS, the comparison is extended by 5° zones to $-40°$, and thence by two shorter zones to $-46°.8$.

The value representing the correction to the Poulkova Refractions is consistent up to $-40°$, when there begins a decided numerical increase. This would be taken up in theory, by a larger variation in μ, beginning sensibly at about 77° zenith distance.

In the Poulkova Tables, the value of μ at the zenith has been diminished 0.0217, at Declination $-40°$, for this Latitude. At Declination $-20°$, the diminution is 0.0030. At Declination $-46°.8$, μ has been diminished 0.0866, or 29 times the decrease at $-20°$. At $-43°$ the relative decrease is 12 times that at $-20°$.

The value derived from the comparison with Cordoba has been included in the table. There are a large number of stars available for this comparison, nearly the entire strength of the PIAZZI list. There is probably a large constant difference included, due either to the use of BESSEL'S Refraction in the derivation of the Latitude at Cordoba, affecting all Declinations determined from the zenith distances observed there; or it may be due, partly, to the cumulative effect of proper motions, in the interval of twenty-five years. As indicated later, in the catalogue comparison, the total effect is in the neighborhood of half a second of arc.

The second part of Table I gives the corresponding proportional decrease in the Poulkova constant, by treating each catalogue by itself. The systematic error

of the catalogue Declinations is thus eliminated, and the results indicate the decrease necessary for the extension South, of such Declination system, by observations made here. The results have been combined, with 10° zones of stars as a basis, and the stars below −30° have been combined in smaller zones.

Thus for the catalogue of NEWCOMB, there are given the separate values for each 10° zone, from the Equator to −40°, compared with the shorter zones South. Down to −40°, the indicated correction is consistent with that derived in the first part of the table. Below −40° the correction is larger, and noticeably so for the comparison of the zone, −30° to −40°, with stars South of it. This should be the best value for the extreme Southern stars, for the change in the total refraction is relatively great; and moreover the computed value is not influenced by whatever refraction has been applied North of −30°. In computing with the 10° group at −5° as a basis, the resulting correction should be applied throughout, while it is evident that North of −40° the correction can not much exceed 0.004.

The real correction to the Poulkova Refraction Tables, for this situation, would probably be represented by a variation in μ, which would increase systematically, from the zenith to the extreme limit of observations. But on account of the limited number of standard stars for comparison, it has been considered sufficient, for the present purpose, to adopt a constant value of the decrease in μ up to −40°, and a larger value for the group of stars below −40°. These mean values have considerable weight, and it is evident from the table that substantial conformity with existing systems of standard stars will be attained, for the Declinations of this list. The standard stars form about ten per cent of the whole list. The values adopted are 0.0035 up to −40° Declination; and 0.0104 below. This necessarily introduces a somewhat abrupt change in the rate of variation, at zenith distance 77°, but the comparisons indicate a notable increase in the rate, very nearly at that point.

The value adopted for the correction, up to −40°, corresponds closely to an increase of 1°.9 Fahr. in the temperature factor of the Refraction, or to a decrease of 0.09 inch in the barometer factor; these factors being taken from the corresponding tables of Volume I of the Publications of this Observatory. It is not likely that the thermometer in use can be in error by a sensible amount. The practice is to have two thermometers, hung side by side, in the air space on the North side of the observing room; and to send each one at intervals, alternately, to San Francisco, to be compared with the Weather Bureau standard. The corrections have always been very small, and in general, when both are in use here, there is no appreciable difference in the readings of the two. Ordinarily there is not a difference of one degree between inside and outside temperatures, when the observing room is closed. It has been well constructed, with this end in view, with ample air space on all sides and overhead, protected by louvre work. When

the room has been opened up for ventilation, the adjustment to outside conditions is rapid and thorough. Thermometers suspended in the North and South observing opening have shown constant and quite exact coincidence with those used for the ordinary meteorological record.

The usual conditions for observing here are more stable than those experienced at most other stations. The temperature remains nearly stationary upon the best nights, often not changing more than one degree in several hours. The barometric pressure is also quite steady, ordinarily a drop of one or two hundredths being experienced. Four hundredths is the maximum recorded in this series. The meteorological record will be found in Table XI, with a condensed tabulation of monthly range and means.

It is possible that the barometer coefficient, which has been derived for the refraction at lower altitudes, may not hold strictly, when extended, as in the tables of Volume I, for an altitude of 4200 feet. The determination, differentially, of the temperature and barometer factors, will always be difficult and uncertain here, by reason of the very excellence and stability of the conditions, referred to above. The maximum ranges are small, under all good observing conditions, throughout the year. Such indications, as are given by the changes during this series of observations, will be found at the foot of Table XI, with the computed temperature and barometer effects.

It should be noted as evidence, contrary to the decrease in the Refractions, that the circumpolar observations of this series, taken separately, do not confirm such change. Thus the values of the observed Latitude from lower culminations, using the Poulkova Refractions, are larger than those derived from upper culminations. The contrary result would be given if the Poulkova Refractions are too large, and if the adopted Declinations of the Circumpolar stars are correct. The corrected Declinations, by Dr. AUWERS, in A. N. 3509, have been adopted in this series. In the mean, they do not differ by more than one hundredth of a second from the A. G. System, but the average correction applied is $\pm 0''.25$. Earlier sets of observations, here, have given generally larger Latitude values from the upper culminations, this series being the exception.

The range of zenith distance is hardly great enough to make any differential determination of the Refraction, from the Circumpolar stars alone, of much weight. The separate evidence is collected in Table IX, following.

From the Refraction correction, derived in Table I, the corrections to the observations have been computed for Table II. Down to $-40°$ Declination, the computed correction is of the form, $0''.20 \tan Z.\ D.$; and below that Declination, $0''.60 \tan Z.\ D.$ The Declination corrections are given in the first part; and the corrections to the observed Latitude, in the second part. At the mean of the zone of Fundamental stars, the Declination correction will be zero. Except in the close

neighborhood of the Pole, the refraction error is not eliminated in the determination of North Declinations, observed at both culminations. For stars at 80°, the adopted correction to the mean of both culminations would be +0".10; and at 70°, the correction would be +0".25. From the detailed results of circumpolar observations, Table VII, the adopted refraction correction will be seen to satisfy the adopted Declinations, in the mean correction to the separate culminations; while they indicate a correction to the North stars of +0".26. The Latitude observations, in Table VIII, give a similar result, $\Delta\varphi$ (U. C. —L. C.) = —0".52. Using the Poulkova Refractions, the $\Delta\varphi$ is —0".19.

TABLE I.

CORRECTION TO THE POULKOVA REFRACTIONS.

Comparison between Circumpolar Latitudes and Catalogues.

Catalogue.	0 - 30°	20° - 30°	30° - 35°	35° - 40°	40° - 43°	43° - 46°.8
Auwers' B. J. . . .	(-0.0009)					
Auwers' 303 . . .	- .0035					
Newcomb Fund. .	- .0038	-0.0041	-0.0042	-0.0040	-0.0060	-0.0076
Boss S. Stand. . .		- .0039	- .0036	- .0039	- .0051	- .0067
Auwers' S. Fund. .		- .0047	- .0036	- .0041	- .0062	- .0068
Mean	-0.0036	-0.0042	-0.0039	-0.0040	-0.0058	-0.0070
					40° - 46°.8	
Cordoba G. Cat. . .	-0.0066	-0.0058	-0.0058	-0.0062	-0.0077	

Effect of Δ +1° Fahr. in Temperature, equivalent to -0.0020.
Effect of Δ -0.1 inch in Barometer, equivalent to -0.0040.

Southern Catalogues compared with Observation.

Catalogue.	Decl.	30° - 35°	35° - 40°	40° - 43°	43° - 46°.8
Newcomb Fund. . . .	- 5°	-0.0051	-0.0045	-0.0075	-0.0093
	-15	.0059	.0049	.0081	.0098
	-25	.0045	.0038	.0082	.0101
	-35			.0106	.0120
Boss S. Stand.	-25	-0.0020	-0.0039	-0.0065	-0.0088
	-35			.0080	.0104
Auwers' S. Fund. . . .	-25	(+0.0008)	-0.0029	-0.0078	-0.0083
	-35			.0116	.0102
Means to -25°		-0.0036	-0.0037	-0.0074	-0.0089
Mean of -35°				-0.0100	-0.0108
				40° - 46°.8	
Cordoba G. Cat. . . .	- 5	-0.0037	-0.0051	-0.0078	
	-15	.0048	.0060	.0085	
	-25	.0058	.0069	.0094	
	-35			.0110	

Refraction correction adopted: -0.0035 up to -40° Declination; -0.0104 below -40°.

TABLE II.

REFRACTION CORRECTIONS.

Included in the Declinations of the Catalogue.

Decl.	Corr.	Decl.	Corr.	Circumpolar Stars.		
				U. C.	Decl.	L. C.
0°	−0″.087	40°	+0″.65	−0″.36	68°	+0″.97
5	− .058	40.5	+ .76	− .36	69	+ .92
10	− .023	41	+ .88	− .37	70	+ .88
15	+ .019	41.5	+1.02	− .37	71	+ .84
				− .38	72	+ .81
20	+ .072	42	+1.17	− .38	73	+ .78
				− .39	74	+ .75
25	+ .142	42.5	+1.33	− .39	75	+ .73
30	+ .239	43	+1.50	− .40	76	+ .70
				− .41	77	+ .68
31	+ .263	43.5	+1.70	− .41	78	+ .66
				− .42	79	+ .64
32	+ .290	44	+1.92	− .42	80	+ .63
33	+ .320	44.5	+2.16	− .43	81	+ .61
				− .44	82	+ .60
34	+ .352	45	+2.44	− .44	83	+ .58
				− .45	84	+ .57
35	+ .388	45.5	+2.75	− .46	85	+ .56
36	+ .428	46	+3.11	− .47	86	+ .54
				− .47	87	+ .53
37	+ .473	46.3	+3.36	− .48	88	+ .52
				− .49	89	+ .51
38	+ .524	46.6	+3.63	− .50	90	+ .50
39	+ .583	46.8	+3.82			
40	+ .650					

Applied to Observed Latitudes.

Decl.	Corr.	Circumpolar Stars.		
		U. C.	Decl.	L. C.
0°	−0″.153			
1	.158			
2	.164	+0″.119	68°	+0″.729
3	.170	.123	69	.682
4	.176	.128	70	.641
5	.182			
6	.188	.133	71	.604
7	.195	.138	72	.570
8	.202	.144	73	.540
9	.210	.149	74	.512
10	.217	.154	75	.487
11	.225			
12	.233	.160	76	.464
13	.241	.166	77	.442
14	.250	.172	78	.422
15	.259	.178	79	.404
16	.269	.184	80	.387
17	.279			
18	.289	.191	81	.371
19	.300	.198	82	.356
20	.312	.205	83	.342
21	.324	.212	84	.329
22	.337	.219	85	.316
23	.351			
24	.366	.227	86	.304
25	.381	.235	87	.293
26	.398	.244	88	.282
27	.416	.253	89	.272
28	.435	+0.262	90	+0.262
29	.456			
30	.479			
31	.503			
32	−0.530			

(4) **The Fundamental Places.** Following the method of Volume IV, the tabulated details of observation, and comparison, are collected below in sequence, with a few lines of description. Reference has already been made to some of the results exhibited in the tables.

TABLE III. AUWERS' PLACES OF THE B. J. FUNDAMENTAL STARS. All of these stars are included in the PIAZZI Catalogue. The places tabulated here include AUWERS' corrections to the Ephemeris places, from the Astronomische Nachrichten, Nos. 3508 and 3509, and the proper motions are from the same source. These proper motions have been applied, in deriving the Observed Corrections to the adopted places.

The mean corrections to the B. J. Ephemeris places, applied by Dr. AUWERS, are: $+0^s.004$ and $-0''.01$; and the average corrections are: $\pm 0^s.022$ and $\pm 0''.31$; in Right Ascension and Declination, respectively.

In the reduction of this series of observations, the Right Ascensions, and corresponding proper motions, have been used without change. The Declinations have been given the mean correction $+0''.40$ throughout.

This correction is the result of the comparison of the observed Latitudes, derived from the 129 stars of this list, and 148 stars from AUWERS' list of 303 Southern stars.

The Declinations of this list can be reduced to the 303 list, for stars common to both, by the application of the corrections: $+0''.15 \; -0''.015\,\delta^{\circ}$. The Right Ascensions are identical, for stars common to both lists.

In the Observed Corrections, it is to be assumed that probable errors of observation may form a considerable part, and in general, the reality of any correction, not exceeding twice the probable error of observation, may be considered doubtful. The number of observations ranges from two (in one case a single observation) up to twelve, the average being slightly less than four. The probable errors of observation would be, for the mean of four, $\pm 0^{s}.011$ in R. A. and $\pm 0''.19$ in Decl., including division error in the latter.

The mean, by stars, leaves a small outstanding correction to the adopted Right Ascensions, $+0^{s}.006$; balanced very nearly by the mean of the list of 303, which gives a difference of $-0^{s}.003$, for a larger number of stars. In Declination, the mean correction $+0''.41$ is represented closely by the assumed correction to the B. J. Declinations.

The residuals indicate the probable errors of a place of this list, which may be assumed as $\pm 0^{s}.013$ and $\pm 0''.15$, in Right Ascension and Declination, respectively.

The Observed Declinations and Latitudes have been corrected, here, for the computed decrease in the Poulkova Refractions. The Latitude Variation ($\varphi - \varphi_0$) has been computed for ten-day intervals, and applied to the individual determinations, to obtain the values of φ_0. The average residual is larger for the values of φ_0, than for the Latitude results without the application of this term. The same will be found to be the case, in this series of observations, for all latitudes observed.

Using the Poulkova Refractions, unchanged, the mean φ from this set of stars is $25''.55$, in place of $25''.29$; giving, when compared with the circumpolar results, a correction to the B. J. system of $-0''.16$, in place of $+0''.42$.

TABLE III.

AUWERS' PLACES. B. J. FUNDAMENTAL STARS.

Star.	R. A. 1900.0	Decl. 1900.0	Pr. Mo.		Obs. Corr.		φ	φ_0	No.
	h m s	° ′ ″	s	″	s	″	″	″	
ι Ceti	0 14 19.949	− 9 22 42.09	−0.0028	−0.026	−0.043	+0.54	25.37	25.63	4
12 Ceti	24 56.084	− 4 30 35.58	− .0015	− .002	− .037	+ .66	24.60	24.87	2
β Ceti	38 34.175	−18 32 8.16	+ .0141	+ .043	+ .010	+ .03	25.48	25.75	2
η Ceti	1 3 33.495	−10 42 44.67	+ .0121	− .127	+ .033	+ .52	25.52	25.79	2
θ Ceti	19 1.462	− 8 41 57.78	− .0069	− .210	− .014	+ .01	25.62	25.89	4
τ Ceti	39 25.311	−16 27 51.20	− .1214	+ .854	+ .022	+ .66	25.11	25.38	4
ε Sculp.	40 57.672	−25 33 9.20	+ .0079	− .055	+ .095	− .20	25.71	25.96	4
ζ Ceti	46 31.415	−10 49 44.77	+ .0010	− .025	+ .022	+ .53	25.35	25.62	4
υ Ceti	55 17.564	−21 33 44.88	+ .0076	− .010	+ .012	− .13	26.44	26.71	1
μ Forn.	2 8 30.233	−31 11 35.43	− .0008	− .003	+ .034	+ .95	24.47	24.68	4

Star.	R. A. 1900.0.	Decl. 1900.0.	Pr. Mo.		Obs.-Corr.		φ	φ_0	No.
	h m s	° ′ ″	s	″	s	″	″	″	
67 Ceti	2 11 59.674	− 6 52 58.64	+0.0044	−0.103	+0.033	+0.12	25.93	26.11	2
o Ceti	14 17.608	− 3 25 54.06	− .0016	− .230	− .062	+ .04	25.55	25.80	2
δ Ceti	34 21.323	− 0 6 10.19	− .0009	+ .004	− .007	+ .50	25.21	25.44	2
π Ceti	39 21.736	−14 16 55.93	− .0025	− .001	+ .034	+ .39	25.37	25.63	2
τ 2 Erid.	46 30.113	−21 24 58.80	− .0053	− .015	− .011	+ .55	25.04	25.29	2
η Erid.	51 32.463	− 9 17 46.17	+ .0037	− .214	+ .059	+ .30	25.40	25.63	2
12 Erid.	3 7 49.314	−29 22 53.50	+ .0221	+ .644	+ .048	+1.63	23.96	24.22	2
ε Erid.	28 13.085	− 9 47 48.35	− .0675	+ .020	+ .026	+ .59	24.89	25.12	4
δ Erid.	38 27.389	−10 6 6.57	− .0082	+ .762	+ .006	+ .37	25.68	25.95	2
τ 6 Erid.	42 32.699	−23 32 42 81	− .0130	− .518	+ .032	+ .13	25.27	25.49	4
γ Erid.	53 21.766	−13 47 34.81	+ .0031	− .101	+ .017	+ .26	25.51	25.77	2
o 1 Erid.	4 6 58.991	− 7 5 53.87	− .0005	+ .089	− .024	+ .49	24.93	25.12	3
ν Erid.	31 19.275	− 3 33 24.98	− .0013	+ .002	+ .049	+ .34	25.36	25.60	2
53 Erid.	33 35.981	−14 29 58.53	− .0066	− .162	− .007	+1.67	23.71	23.69	2
μ Erid.	40 30.079	− 3 26 16.67	.0000	− .008	− .014	+ .47	25.28	25.43	2
ε Lepor.	5 1 13.648	−22 30 19.87	+ .0011	− .071	+ .005	+1.20	24.44	24.55	4
β Erid.	2 55.960	− 5 12 56.57	− .0075	− .075	− .008	+ .34	25.33	25.43	4
λ Erid.	4 21.597	− 8 52 56.32	− .0013	+ .002	+ .010	+ .40	25.32	25.44	2
β Orion.	9 43.867	− 8 19 1.75	− .0011	+ .007	− .012	+ .16	25.28	25.35	4
τ Orion.	12 45.002	− 6 57 8.80	− .0022	+ .012	− .013	− .15	25.60	25.67	6
η Orion.	19 26.904	− 2 29 20.78	− .0008	+ .011	− .012	+ .10	25.54	25.53	4
β Lepor.	23 57.605	−20 50 21.45	− .0010	− .085	+ .037	+1.19	24.54	24.60	2
δ Orion.	26 53.803	− 0 22 23.26	− .0014	+ .007	+ .003	+ .36	25.18	25.35	2
α Lepor.	28 19.148	−17 53 38.17	− .0008	+ .010	− .051	+ .66	25.25	25.48	2
θ 1 Orion.	30 21.706	− 5 27 19.91	− .0013	+ .023	+ .012	+ .04	25.64	25.75	2
θ 2 Orion.	30 28.207	− 5 28 54.29	− .0009	+ .025	+ .007	+ .16	25.23	25.21	2
ι Orion.	30 32.435	− 5 58 31.81	− .0011	+ .005	+ .013	+ .45	25.31	25.46	2
ε Orion.	31 8.296	− 1 15 56.81	− .0013	+ .001	+ .014	− .11	25.59	25.63	2
σ Orion.	33 43.500	− 2 39 27.80	− .0014	+ .011	− .017	− .01	25.92	26.15	2
γ Lepor.	40 17.648	−22 28 52.06	− .0213	− .376	+ .009	+ .44	25.36	25.38	9
ζ Lepor.	42 25.425	−14 51 33.26	− .0021	+ .008	+ .011	+ .61	25.02	25.12	4
κ Orion.	43 0.782	− 9 42 18.53	− .0010	+ .004	+ .053	− .14	25.91	26.06	2
δ Lepor.	47 1.227	−20 53 15.50	+ .0159	− .642	+ .040	+ .84	24.74	24.76	6
η Lepor.	51 50.981	−14 11 9.63	− .0041	+ .142	+ .034	+ .50	25.33	25.46	4
β Can. Maj.	6 18 17.723	−17 54 22.66	− .0016	+ .010	− .007	+ .32	25.58	25.55	9
10 Monoc.	23 1.279	− 4 42 0.99	− .0012	+ .027	− .050	+ .35	25.41	25.56	2
ξ 2 Can. Maj.	30 51.904	−22 53 8.49	+ .0006	+ .013	+ .001	+ .36	25.02	25.01	2
α Can. Maj.	40 44.565	−16 34 44.39	− .0379	−1.207	+ .043	+ .77	24.52	24.55	2
θ Can. Maj.	49 32.611	−11 54 48.01	− .0107	− .002	− .018	+ .23	25.60	25.56	4
ε Can. Maj.	54 41.702	−28 50 10.08	− .0009	+ .003	+ .003	+ .67	25.09	25.05	6
γ Can. Maj.	59 14.049	−15 29 7.88	− .0003	− .001	+ .002	+ .26	25.01	25.04	2
δ Can. Maj.	7 4 19.486	−26 14 4.50	− .0014	+ .006	+ .027	+ .58	25.33	25.31	6
25 Monoc.	32 18.368	− 3 53 15.62	− .0062	+ .025	.000	+ .29	25.55	25.50	8
ι Navis	8 3 17.092	−24 0 57.94	− .0073	+ .054	+ .009	+ .08	25.49	25.39	10
20 Navis	8 44.180	−15 29 12.94	− .0019	+ .006	+ .054	+ .06	25.92	25.78	2
Br. 1197	20 39.828	− 3 34 48.42	− .0053	− .012	+ .003	+ .10	25.62	25.58	2
α Hydr.	9 22 40.388	− 8 13 30.52	− .0022	+ .041	+ .017	+ .54	25.47	25.40	2
6 Sex.	46 11.681	− 3 46 28.66	− .0002	− .014	− .024	+ .65	25.33	25.20	2
λ Hydr.	10 5 42.756	−11 51 35.16	− .0148	− .072	− .007	+ .34	25.40	25.27	2
μ Hydr.	21 15.203	−16 19 33.13	− .0099	− .073	+ .022	+ .94	24.80	24.67	2
α Ant.	22 34.484	−30 33 31.70	− .0077	+ .017	+ .110	+1.00	24.49	24.26	2
33 Sex.	36 18.936	− 1 12 57.22	− .0110	− .112	− .001	+ .02	25.91	25.72	4
ν Hydr.	44 41.390	−15 40 13.31	+ .0051	+ .213	+ .018	+ .34	24.91	24.67	2
β Crater.	11 6 44.305	−22 16 47.90	− .0017	− .090	+ .020	+ .35	25.43	25.19	2
δ Crater.	14 20.395	−14 14 14.81	− .0102	+ .210	− .003	+ .73	24.95	24.70	8
γ Crater.	19 53.094	−17 8 5.43	− .0082	+ .009	− .021	+ .45	25.39	25.13	4
ξ Hydr.	28 4.916	−31 18 16.26	− .0175	− .033	− .046	+ .57	24.91	24.68	2
ε Corvi	12 4 58.813	−22 3 49.39	− .0060	+ .020	− .032	+ .49	25.18	24.98	4
γ Corvi	10 39.709	−16 59 12.20	− .0127	+ .033	− .025	+ .96	24.44	24.34	2
δ Corvi	24 41.315	−15 57 31.71	− .0157	− .130	+ .005	+ .71	25.03	24.84	4

Star.	R. A. 1900.0.	Decl. 1900.0.	Pr. Mo.		Obs. Corr.		φ	φ_o	No.
	h m s	° ′ ″	s	″	s	″	″	″	
β Corvi	12 29 7.930	−22 50 37.98	−0.0019	−0.046	+0.012	+0.45	25.31	25.17	2
γ Virg. *m.**	36 35.515	− 0 54 3.69	− .0392	+ .020	− .061	+ .27	25.62	25.37	4
θ Virg.	13 4 46.258	− 5 0 18.79	− .0038	− .028	− .009	+ .24	25.37	25.17	10
γ Hydr.	13 29.003	−22 38 39.18	+ .0037	− .052	− .008	+ .38	24.74	24.55	6
α Virg.	19 55.388	−10 38 22.11	− .0043	− .021	− .013	+ .27	25.13	24.98	8
89 Virg.	44 26.180	−17 38 10.25	− .0082	− .030	+ .013	+ .73	24.94	24.70	2
κ Virg.	14 7 33.577	− 9 48 30.09	− .0010	+ .150	− .001	+ .66	24.90	24.79	2
ι Virg.	10 46.131	− 5 31 24.54	− .0029	− .417	+ .004	+ .14	25.48	25.31	12
φ Virg.	23 2.915	− 1 46 47.31	− .0104	+ .002	+ .012	+ .26	25.26	25.09	4
μ Virg.	37 47.310	− 5 13 24.87	+ .0052	− .313	+ .016	+ .07	25.29	25.13	4
8 Libr.	45 9.220	−15 34 54.13	− .0088	− .068	− .002	+ .87	24.94	24.68	2
α Libr.	45 20.666	−15 37 35.23	− .0091	− .066	+ .009	+ .25	25.42	25.22	4
γ Scorp.	58 12.896	−24 53 21.38	− .0074	− .051	+ .048	− .02	25.63	25.49	2
ι Libr.	15 6 31.139	−19 24 48.50	− .0048	− .035	− .007	+1.00	24.73	24.68	4
β Libr.	11 37.449	− 9 0 50.79	− .0079	− .016	+ .001	+ .38	25.23	25.07	4
γ Libr.	29 55.827	−14 27 21.89	+ .0029	+ .018	− .032	− .31	25.71	25.58	2
μ Serp.	44 23.991	− 3 7 27.67	− .0077	− .020	+ .011	+ .30	25.29	25.14	6
δ Scorp.	54 25.104	−22 20 14.65	− .0025	− .030	− .004	+ .56	25.09	24.95	8
β Scorp.	59 37.227	−19 31 55.19	− .0023	− .018	− .016	+ .76	24.90	24.75	6
δ Oph.	16 9 6.223	− 3 26 13.32	− .0045	− .140	+ .035	+ .08	25.38	25.26	2
ε Oph.	13 1.710	− 4 26 56.16	+ .0036	+ .041	+ .014	+ .02	26.00	25.88	4
α Scorp.	23 16.440	−26 12 37.35	− .0024	− .022	+ .029	+ .61	25.02	24.90	4
ζ Oph.	31 39.049	−10 21 52.98	− .0009	+ .033	− .003	+ .52	25.18	25.04	4
η Oph.	17 4 38.495	−15 36 4.52	+ .0005	+ .100	− .008	+ .42	25.40	25.26	4
θ Oph.	15 52.001	−24 53 59.74	− .0024	− .017	+ .030	+ .26	25.65	25.60	2
ξ Serp.	31 51.575	−15 20 8.87	− .0048	− .058	+ .013	+ .36	25.39	25.25	8
ν Oph.	53 31.223	− 9 45 41.20	− .0024	− .112	+ .009	+ .12	25.80	25.72	2
γ Sagit.	59 22.996	−30 25 31.94	− .0060	− .188	− .006	+ .92	24.82	24.82	6
μ Sagit.	18 7 46.942	−21 5 6.74	− .0019	+ .005	− .012	+ .51	25.13	25.07	4
η Serp.	16 8.075	− 2 55 29.70	− .0393	− .686	− .012	.00	25.79	25.77	4
σ Sagit.	49 3.846	−26 25 16.37	− .0016	− .061	+ .027	+1.04	24.58	24.54	8
λ Aquil.	19 0 56.496	− 5 1 57.51	− .0031	− .080	+ .006	+ .23	25.49	25.47	4
π Sagit.	3 49.002	−21 10 58.14	− .0020	− .028	+ .004	+ .63	24.89	24.85	6
h Sagit.	30 37.327	−25 6 16.23	+ .0030	− .013	+ .014	+ .44	25.48	25.40	2
θ Aquil.	20 6 8.691	− 1 7 5.73	+ .0004	+ .010	− .002	+ .18	25.59	25.78	2
α 1 Capric.	12 6.323	−12 49 2.77	− .0005	+ .012	− .017	+ .71	25.63	25.88	2
α 2 Capric.	12 30.394	−12 51 18.01	+ .0026	+ .013	− .013	− .33	26.23	26.34	4
β Capric.	15 23.580	−15 5 50.44	+ .0007	+ .013	+ .019	+ .43	25.49	25.64	4
ρ Capric.	23 9.429	−18 8 39.82	− .0028	− .008	− .002	− .04	25.87	26.00	6
υ Capric.	34 21.461	−18 29 27.64	− .0033	− .015	− .006	+ .37	25.40	25.53	4
ε Aquar.	42 15.757	− 9 51 43.32	− .0004	− .026	+ .015	+ .37	25.35	25.42	12
ν Aquar.	21 4 8.844	−11 46 36.30	+ .0049	− .004	+ .014	+ .22	25.47	25.61	4
ζ Capric.	20 57.515	−22 50 41.03	− .0017	+ .026	+ .002	+ .39	25.58	25.81	2
β Aquar.	26 17.671	− 6 0 40.41	− .0005	+ .001	+ .022	+ .19	25.65	25.80	6
γ Capric.	34 33.067	−17 6 50.98	+ .0115	− .014	− .001	+ .09	25.65	25.75	6
λ Capric.	41 9.176	−11 49 38.29	+ .0006	− .003	− .043	+ .61	25.22	25.32	6
δ Capric.	41 31.301	−16 34 52.53	+ .0160	− .290	+ .018	+ .61	25.15	25.22	6
α Aquar.	22 0 38.855	− 0 48 20.83	− .0005	− .003	+ .008	+ .23	25.74	25.91	4
ι Aquar.	1 2.207	−14 21 18.02	+ .0007	− .053	+ .017	+ .19	25.18	25.32	4
θ Aquar.	11 33.416	− 8 16 52.95	+ .0059	− .018	+ .002	+ .24	25.53	25.68	6
γ Aquar.	16 29.456	− 1 53 29.06	+ .0068	+ .009	− .002	+ .54	25.15	25.36	6
η Aquar.	30 13.056	− 0 37 59.03	+ .0045	− .053	− .010	+ .01	25.49	25.67	4
τ Aquar.	44 17.857	−14 7 13.97	− .0026	− .028	+ .001	+ .34	25.42	25.68	4
λ Aquar.	47 23.844	− 8 6 42.63	− .0012	+ .040	− .020	+ .74	24.93	25.16	4
δ Aquar.	49 20.596	−16 21 10.02	− .0050	− .016	+ .023	+ .79	25.36	25.61	2
α Pis. Aus.	52 7.524	−30 9 9.05	+ .0235	− .164	+ .008	+ .81	24.87	25.12	4
c 2 Aquar.	23 4 6.905	−21 42 55.57	+ .0018	+ .033	+ .001	+ .55	25.43	25.64	2
ω 2 Aquar.	37 32.194	−15 5 52.59	+ .0047	− .060	+ .005	+ .39	25.46	25.68	2
δ Sculp.	43 43.030	−28 41 0.61	+ .0051	− .101	+ .055	+ .39	25.10	25.33	4
129 stars.				Sum					494
				Means	+0.006	+0.41	25.29	25.32	
				v	±0.019	±0.26	±0.31	±0.36	

* Observed each star separately.

TABLE IV. AUWERS' PLACES OF 303 STARS. This list includes stars of the PIAZZI Catalogue which are not found in the main Ephemeris of the *Berliner Jahrbuch*. The places include AUWERS' corrections to the original list, from A. N. 3511.

The mean corrections applied by Dr. AUWERS are: $-0^s.001$ and $-0''.38$; the average corrections being $\pm 0^s.013$ and $\pm 0''.39$. The change in Declination shifts the system in the direction of the A. G. C. star places; the difference in the original systems having been, $+0''.50 - 0''.02\ \delta°$; while the difference of the corrected systems is: $+0''.15 - 0''.015\ \delta°$. This represents a change of $-0''.35$ at the Equator, and $-0''.48$ at Declination $-25°$, the limit of the 303 list. The corrected places of these stars, for 1900, are printed in the 1901 *Berliner Jahrbuch*, with the proper motions.

The details of this table are similar to those of Table III. The mean corrections to the adopted places are $-0^s.003$, and $+ 0''.01$, respectively. The probable errors are of the same size as those of the B. J. places. The observations range from two to eleven, on the average four per star. The tabulated Latitudes include the correction to the Poulkova Refractions, bringing the mean of the system into exact accord with the observations of the Circumpolar stars. With the use of the Poulkova Refractions, unchanged, the mean Latitude would be $25''.95$, and the observed correction to the Declination system would be $-0''.56$.

Besides the 148 stars tabulated, there are 105 stars of the 303 list, included in Table III, for which the places can be derived by the application of the actual difference, which for individual stars is given by the expression: $+0''.15 - 0''.015\ \delta°$. There are 253 stars in the PIAZZI Catalogue, which are included in the 303 standard stars.

In all there are 277 Fundamental stars used in this series of observations. This number could have been increased by including stars, from other standard lists, South of $-30°$; but the additional stars would not be well distributed in Right Ascension; and it has been preferred to use their places for comparison with the observed places, derived from the use of Fundamental stars between 0 and $-31°$.

TABLE IV.

AUWERS' PLACES. 303 Stars.

Star.	R. A. 1900.0	Decl. 1900.0	Pr. Mo.		Obs. Corr.		φ	φ_0	No.
	h m s	° ′ ″	s	″	s	″	″	″	
4 Ceti	0 2 36.696	− 3 6 19.51	+0.0001	+0.015	−0.027	0.00	25.35	25.62	2
7 Ceti	9 33.683	−19 29 13.15	− .0028	− .063	− .022	− .04	25.87	26.06	4
9 Ceti	17 44.349	−12 45 56.90	+ .0257	+ .077	− .010	− .40	26.09	26.36	4
P. 91	25 22.683	−24 20 26.96	− .0038	+ .032	+ .015	− .99	26.75	27.01	2
15 Ceti	32 57.717	− 1 3 12.36	− .0048	− .002	− .010	− .16	25.71	25.97	4
19 Ceti	45 7.053	−11 10 58.38	− .0173	− .217	+ .020	− .22	25.85	26.11	6
22 Ceti	51 0.597	−11 48 28.90	− .0034	+ .003	+ .040	+ .02	25.88	26.15	4
39 Ceti	1 11 31.608	− 3 1 35.92	− .0089	− .056	.000	+ .12	25.56	25.83	4
48 Ceti	24 48.298	−22 8 47.77	+ .0024	+ .004	− .002	− .42	26.47	26.74	2
50 Ceti	31 6.338	−15 54 42.35	+ .0002	+ .017	− .017	+ .53	24.95	25.21	4

Star.	R. A. 1900.0.	Decl. 1900.0.	Pr. Mo.		Obs. Corr.		φ	φ_o	No.
	h m s	° ′ ″	s	″	s	″	″	″	
P. 167	1 40 58.047	− 6 14 0.87	−0.0028	−0.024	−0.014	−0.28	25.87	26.13	4
61 Ceti	58 40.986	− 0 49 11.39	+ .0041	− .044	− .013	+ .15	25.55	25.80	4
62 Ceti	2 4 5.547	− 2 48 16.98	− .0075	− .027	− .045	+ .70	25.00	25.24	2
κ For.	17 57.973	−24 16 14.51	+ .0125	− .053	+ .056	− .13	25.83	26.06	2
ρ Ceti	21 7.094	−12 44 29.16	− .0028	− .007	− .005	+ .14	25.63	25.89	2
σ Ceti	27 20.816	−15 41 0.81	− .0071	− .116	+ .039	+ .40	25.22	25.45	2
81 Ceti	32 39.478	− 3 49 44.41	+ .0018	− .034	− .013	+ .09	25.53	25.75	2
τ 3 Erid.	57 58.924	−24 0 59.43	− .0126	− .049	+ .021	− .45	26.08	26.32	4
94 Ceti	3 7 40.173	− 1 34 12.07	+ .0124	− .048	− .044	+ .16	25.61	25.87	2
ζ Erid.	10 58.493	− 9 11 28.00	− .0021	+ .053	− .011	+ .23	25.39	25.61	2
τ 4 Erid.	15 4.076	−22 7 18.40	+ .0021	+ .050	− .004	− .59	26.30	26.53	2
17 Erid.	25 39.263	− 5 25 4.41	− .0006	+ .022	− .031	− .16	25.77	26.01	4
20 Erid.	31 44.002	−17 47 53.36	+ .0007	− .012	− .005	+ .64	25.41	25.68	2
24 Erid.	39 25.676	− 1 28 42.30	− .0009	+ .003	+ .033	− .78	26.40	26.63	2
30 Erid.	47 45.194	− 5 39 35.32	− .0016	− .002	− .053	− .21	25.67	25.88	4
A. Erid.	4 9 38.200	−10 30 16.47	− .0016	− .155	− .024	+ .32	25.43	25.58	2
ξ Erid.	18 42.042	− 3 58 35.69	− .0039	− .045	− .033	+ .19	25.31	25.36	10
45 Erid.	26 45.671	− 0 15 30.19	− .0010	+ .006	− .044	+ .14	25.50	25.61	6
54 Erid.	36 3.993	−19 51 47.93	+ .0001	− .079	− .013	− .18	25.92	25.97	2
60 Erid.	45 41.145	−16 23 27.17	+ .0018	+ .073	− .015	+ .34	24.94	24.97	2
64 Erid.	4 55 16.906	−12 41 5.17	+ .0015	− .081	+ .036	− .24	25.90	26.03	2
5 Monoc.	6 9 58.687	− 6 14 38.88	− .0010	− .020	− .043	+ .35	25.44	25.55	4
6 Monoc.	12 53.049	−10 41 17.59	− .0026	− .012	− .001	+ .51	25.25	25.20	4
19 Can. Maj.	51 17.257	−20 0 32.18	+ .0029	+ .052	+ .040	+ .24	25.60	25.77	2
P. 303	54 30.034	−25 16 41.70	− .0012	+ .045	− .028	− .52	26.08	26.10	6
19 Monoc.	57 56.891	− 4 5 38.80	− .0015	+ .012	− .001	+ .33	25.64	25.65	7
20 Monoc.	7 5 15.651	− 4 4 51.26	− .0016	+ .225	+ .008	+ .12	25.59	25.57	6
29 Can. Maj.	14 30.537	−24 22 34.15	− .0013	+ .011	− .013	− .12	25.97	26.14	2
P. 85	17 14.327	− 8 47 24.46	+ .0003	+ .021	− .034	− .20	25.94	25.99	2
P. 116	23 9.585	−11 21 13.93	− .0022	+ .013	+ .001	+ .03	25.95	25.95	6
26 Monoc.	36 28.126	− 9 19 4.11	− .0074	− .015	+ .014	+ .21	25.46	25.38	6
4 Navis	41 20.581	−14 19 14.16	− .0019	+ .018	− .021	+ .34	25.34	25.44	2
9 Navis	47 8.446	−13 37 57.34	− .0058	− .329	+ .001	+ .13	26.21	26.16	3
e Navis	52 33.521	−22 36 47.19	− .0044	+ .023	+ .046	− .23	26.11	26.10	8
27 Monoc.	54 44.417	− 3 24 24.94	− .0039	+ .013	− .018	+ .48	25.18	25.18	6
P. 95	8 27 1.306	−19 14 22.16	− .0028	+ .018	− .022	− .71	26.68	26.58	4
Br. 1212	30 35.380	− 7 38 16.40	− .0031	+ .028	+ .024	− .06	26.07	25.96	4
6 Hydr.	35 17.172	−12 7 18.26	− .0078	+ .013	.000	+ .04	25.81	25.71	2
P. 167	42 10.896	− 1 31 49.62	− .0031	+ .022	− .031	− .34	26.20	26.02	3
15 Hydr.	46 39.560	− 6 48 8.72	− .0046	+ .018	+ .033	− .17	25.92	25.79	2
P. 227	54 2.373	−15 45 4.06	+ .0177	+ .238	− .042	+ .11	25.64	25.46	11
19 Hydr.	9 3 48.524	− 8 11 6.15	− .0027	+ .001	− .036	− .11	25.82	25 67	4
P. 13	7 23.896	−19 20 19.62	− .0055	+ .063	− .008	− .60	25.85	25.61	2
θ Pyx.	17 3.913	−25 32 23.30	− .0030	+ .002	+ .044	− .07	25.44	25.21	4
τ 2 Hydr.	26 53.052	− 0 44 36.94	− .0019	+ .002	− .027	− .15	25.90	25.77	2
κ Hydr.	35 30.706	−13 52 42.56	− .0032	− .002	+ .024	+ .21	25.51	25.36	3
υ 2 Hydr.	10 0 15.282	−12 34 46.59	− .0035	+ .033	− .008	− .25	25.98	25.78	10
22 Sex.	12 39.630	− 7 34 9.64	− .0120	+ .024	− .015	− .37	26.25	26.06	4
25 Sex.	18 23.213	− 3 34 6.94	− .0051	+ .008	+ .003	− .45	25.94	25.72	2
Br. 1462	25 58.371	− 7 7 27.91	− .0041	+ .020	− .006	− .22	26.06	25.84	2
44 Hydr.	29 15.465	−23 13 47.28	− .0014	+ .034	− .026	− .14	25.63	25.41	2
φ Hydr.	33 42.535	−16 21 26.47	− .0092	+ .038	+ .023	+ .17	25.42	25.19	6
41 Sex.	45 17.016	− 8 22 4.14	− .0023	+ .007	− .013	− .20	25.99	25.75	2
b 2 Hydr.	48 35.911	−19 36 0.98	+ .0040	− .221	+ .015	+ .27	25.38	25.19	4
p 2 Leon.	56 43.600	− 1 56 46.32	− .0001	− .023	− .012	+ .33	25.17	24.93	6
φ Leon.	11 11 34.652	− 3 6 17.66	− .0080	− .029	− .024	+ .11	25.57	25.34	4
κ Crater.	22 7.231	−11 48 25.79	− .0083	+ .030	+ .024	+ .13	25.70	25.48	2
e Leon.	25 12.297	− 2 27 5.98	− .0001	+ .001	− .027	− .45	26.26	26.01	2
θ Crater.	31 36.509	− 9 14 56.93	− .0051	+ .017	− .002	− .02	25.83	25.57	2
ζ Crater.	39 41.577	−17 47 41.05	+ .0009	− .020	+ .024	+ .16	25.74	25.51	6
η Crater.	50 55.076	−16 35 38.70	− .0052	− .002	+ .038	+ .26	25.25	25.01	4
M. 499	12 0 52.556	− 2 34 27.36	− .0032	− .005	− .028	− .38	25.98	25.83	6
P. 54	15 45.849	−13 0 39.32	− .0015	+ .029	+ .002	− .33	25.96	25.82	3
M. 510	22 43.663	− 4 3 43.10	− .0072	+ .005	− .005	+ .30	25.29	25.16	4
χ Virg.	34 5.030	− 7 26 42.70	− .0064	− .017	+ .008	− .30	25.69	25.60	2
M. 522	42 23.272	− 5 45 16.10	− .0014	− .033	− .008	− .19	25.82	25.65	6
ψ Virg.	49 9.063	− 8 59 45.00	− .0033	− .006	+ .014	+ .06	25.49	25.39	2
53 Virg.	13 6 44.124	−15 39 33.25	+ .0028	− .291	− .017	+ .54	25.16	24.96	4
72 Virg.	25 12.615	− 5 57 14.93	+ .0012	+ .024	+ .009	− .45	26.01	25.91	2
73 Virg.	26 39.179	−18 12 48.24	− .0070	− .006	− .034	+ .32	25.30	25.15	2

Star.	R. A. 1900.0.	Decl. 1900.0.	Pr. Mo.		Obs. Corr.		φ	φ_o	No.
	h m s	° ′ ″	s	″	s	″	″	″	
m Virg.	13 36 21.721	− 8 11 54.35	−0.0080	+0.047	0.000	−0.10	25.70	25.52	10
p Virg.	49 33.960	− 1 0 39.77	− .0073	− .013	+ .009	− .31	26.06	25.89	8
47 Hydr.	52 54.366	−24 29 3.02	− .0048	− .034	− .006	+ .36	25.26	25.13	6
40 H. Virg.	14 5 22.667	−15 49 46.94	− .0010	− .003	+ .020	+ .10	25.40	25.23	8
2 Libr.	18 2.675	−11 15 26.46	− .0020	− .055	− .024	+ .43	25.53	25.37	2
M. 575	29 12.975	−20 0 2.37	+ .0010	+ .002	+ .011	+ .69	25.17	24.91	2
15 Libr.	51 20.415	−11 0 22.05	− .0013	+ .013	+ .024	− .14	25.91	25.78	2
δ Libr.	55 37.660	− 8 7 19.66	− .0065	+ .003	+ .016	+ .23	25.33	25.22	2
8 Serp.	15 18 34.315	− 0 39 57.00	+ .0032	− .025	− .016	+ .11	25.57	25.42	2
32 Libr.	22 36.897	−16 22 4.49	− .0006	− .034	+ .003	+ .67	24.77	24.61	4
37 Libr.	28 42.657	− 9 43 18.70	+ .0186	− .236	− .031	− .29	25.80	25.64	4
41 Libr.	33 9.051	−18 58 21.59	+ .0047	− .076	− .001	+ .20	24.78	24.62	2
η Libr.	38 26.756	−15 21 15.29	− .0041	− .064	.000	− .18	25.17	25.01	2
48 Libr.	52 35.249	−13 59 27.14	− .0026	− .008	+ .005	− .13	25.85	25.69	4
11 Scorp.	16 2 3.107	−12 28 35.51	− .0049	− .025	+ .025	− .13	26.09	25.93	2
ψ Oph.	18 14.994	−19 48 12.56	− .0032	− .049	− .002	+ .68	24.93	24.79	4
φ Oph.	25 24.803	−16 23 41.22	− .0055	− .028	− .001	+ .06	25.74	25.58	4
12 Oph.	31 6.192	− 2 6 40.59	+ .0282	− .313	− .009	+ .14	25.53	25.38	4
24 Scorp.	35 47.260	−17 32 55.49	− .0036	+ .002	− .008	+ .04	25.78	25.66	4
20 Oph.	44 18.007	−10 36 22.48	+ .0043	− .092	− .003	+ .13	26.07	25.98	2
24 Oph.	50 46.066	−22 59 29.54	− .0024	− .002	− .016	+ .10	25.70	25.59	4
30 Oph.	55 47.134	− 4 4 21.89	− .0050	− .077	− .035	+ .24	25.36	25.24	6
41 Oph.	17 11 28.584	− 0 19 56.61	− .0032	− .046	− .018	− .10	25.95	25.86	6
ξ Oph.	15 0.567	−21 0 20.12	+ .0151	− .197	− .035	+ .40	25.06	24.94	2
27 H. Oph.	21 19.461	− 4 59 53.72	− .0077	− .038	− .045	− .10	26.01	25.93	2
51 Oph.	25 18.787	−23 53 7.49	− .0020	− .027	+ .079	− .46	26.19	26.03	2
μ Oph.	32 24.508	− 8 3 28.23	− .0018	− .009	+ .017	− .41	25.81	25.68	2
o Serp.	35 47.601	−12 49 18.66	− .0068	− .044	+ .013	− .16	25.69	25.62	4
M. 703	50 2.024	−18 47 4.09	− .0007	− .003	− .028	− .34	25.94	25.88	4
Br. 2329	18 29 28.884	−11 3 18.65	+ .0007	+ .008	+ .020	+ .20	25.41	25.33	4
Br. 2333	32 25.756	−23 35 24.95	− .0028	− .019	+ .015	+ .23	25.56	25.51	6
5 H. Scuti	38 4.467	− 8 22 26.52	− .0002	+ .025	− .015	− .01	25.81	25.79	6
6 H. Scuti	41 52.088	− 4 51 17.48	− .0020	− .007	+ .001	− .41	26.11	26.09	6
30 Sagit.	44 49.796	−22 16 35.61	− .0048	− .012	+ .041	− .45	26.22	26.18	6
P. 260	55 50.633	−15 25 25.39	− .0021	+ .010	+ .004	− .02	25.83	25.77	4
20 Aquil.	19 7 15.239	− 8 6 24.25	− .0006	− .005	− .007	+ .16	25.72	25.68	4
d Sagit.	11 47.049	−19 7 51.39	− .0025	− .003	− .019	− .01	25.70	25.65	4
υ Sagit.	16 0.012	−16 8 33.85	− .0016	+ .004	− .040	+ .08	25.29	25.25	2
e Aquil.	25 26.018	− 2 59 50.43	− .0008	− .001	− .022	+ .06	25.72	25.68	6
κ Aquil.	31 30.700	− 7 14 59.53	− .0012	+ .007	− .066	− .32	26.23	26.18	2
f Sagit.	40 31.739	−20 0 5.84	− .0115	− .078	− .011	+ .09	25.59	25.56	8
51 Aquil.	45 16.675	−11 1 2.36	− .0037	+ .042	+ .002	+ .24	25.43	25.35	4
63 Sagit.	56 22.495	−13 54 51.19	+ .0007	+ .028	− .015	+ .09	25.81	25.80	4
M. 811	57 48.759	−22 52 34.59	− .0050	+ .041	+ .042	− .48	26.48	26.39	2
4 Capric.	20 12 8.918	−22 7 8.21	+ .0001	− .028	− .012	− .16	26.19	26.34	4
M. 842	26 55.423	−10 11 40.58	+ .0184	+ .108	+ .040	− .29	26.11	26.09	3
70 Aquil.	31 31.172	− 2 53 47.15	− .0016	− .001	+ .012	+ .12	25.61	25.71	4
19 Capric.	49 8.848	−18 18 8.06	− .0051	− .006	− .026	+ .33	25.47	25.63	4
11 Aquar.	55 17.900	− 5 7 0.15	+ .0019	− .139	− .010	+ .12	25.85	26.02	8
16 Aquar.	21 15 49.724	− 4 59 4.59	− .0038	+ .016	+ .026	+ .14	25.65	25.69	8
ε Capric.	31 28.915	−19 54 51.35	− .0010	+ .001	+ .008	+ .16	25.62	25.71	6
P. 320	48 56.992	− 4 44 42.61	+ .0011	− .080	+ .004	− .39	26.72	26.96	2
M. 909	53 9.193	−21 39 36.73	− .0002	+ .004	+ .018	+ .50	25.47	25.70	2
M. 911	56 41.616	−18 23 0.93	+ .0054	− .069	− .020	+ .41	25.47	25.65	4
47 Aquar.	22 16 5.308	−22 5 58.06	− .0035	− .082	+ .044	− .36	25.96	26.23	8
50 Aquar.	19 5.686	−14 2 10.88	+ .0017	+ .017	+ .014	+ .31	25.30	25.56	9
σ Aquar.	25 21.322	−11 11 23.18	− .0017	− .021	− .037	+ .03	26.02	26.29	2
υ Aquar.	29 13.471	−21 13 13.92	+ .0140	− .141	.000	− .11	25.84	26.05	6
g Aquar.	38 12.393	−19 21 13.55	− .0040	− .025	+ .006	+ .97	25.09	25.36	2
Br. 3033	52 6.601	− 5 20 40.09	− .0025	+ .014	− .035	− .02	25.70	25.94	4
h Aquar.	59 56.894	− 8 14 0.60	+ .0066	+ .022	+ .030	− .25	26.44	26.70	4
b 1 Aquar.	23 17 43.166	−20 38 47.27	− .0098	− .085	− .024	− .18	25.93	26.01	8
b 3 Aquar.	28 2.672	−21 28 1.85	− .0019	+ .022	− .007	+ .25	25.72	25.95	2
M. 974	30 22.553	− 8 1 4.49	− .0020	+ .028	− .009	+ .15	25.52	25.78	6
M. 986	45 5.084	−10 31 56.58	+ .0068	+ .093	+ .008	+ .68	25.30	25.51	2
i 2 Aquar.	46 11.485	−19 27 54.91	− .0002	+ .011	− .029	+ .06	25.91	26.16	4
27 Pisc.	53 33.183	− 4 6 38.75	− .0051	− .063	− .012	+ .02	25.90	26.16	8
2 Ceti	58 37.014	−17 53 33.77	− .0005	− .007	.000	+ .32	25.30	25.50	6
148 stars.				Sum					588
				Means	−0.003	+0.01	25.71	25.72	
				v	±0.020	±0.26	±0.30	±0.32	

TABLE V. In this table the observed corrections have been combined in groups of 5°, to indicate any variation of observation, from the adopted system.

The most Southern group gives rather a large deviation from the B. J. Right Ascensions. The Declinations show the difference, and the rate of deviation, to be anticipated, from the correction to the B. J. system.

The conformity with the system of 303 is close. The group means are not identically the same as the means by stars, in the two preceding tables.

TABLE V.

OBSERVED EPHEMERIS CORRECTIONS.

	OBSERVED – B. J.					OBSERVED – 303.			
Decl.	No.	Mean.	$\Delta\alpha$	$\Delta\delta$	v	No.	Mean.	$\Delta\alpha$	$\Delta\delta$
° °		°	s	"	"		°	s	"
0–5	24	– 2.5	–0.007	+0.23	–0.21	33	– 2.8	–0.014	0.00
– 5–10	26	– 7.6	+ .006	+ .28	– .16	29	– 7.5	– .013	– .10
– 10–15	20	– 12.7	+ .002	+ .42	– .02	28	– 12.1	– .005	+ .06
– 15–20	26	– 16.8	+ .005	+ .51	+ .07	32	– 17.7	– .006	+ .18
– 20–25	20	– 22.4	+ .010	+ .46	+ .02	26	– 22.6	+ .011	– .12
– 25–32	13	– 28.5	+ .031	+ .72	+ .28				
Sum	129					148			
Group means		– 15.1	+0.008	+0.44			– 12.5	–0.005	0.00

TABLE VI. This includes the Latitude results, in groups of 5° Declination. There are given first the Observed φ, with the use of the Poulkova Refraction unchanged; then the Corrected φ, including the computed correction to the Poulkova Refraction. The residuals are from the last values of φ.

The difference between the two systems, as given by the respective latitudes, is 0".40; or 0".38, if stars down to –25°, only, be included in the B. J. list. There are no stars common to both lists, included in the 303 comparison.

The last column gives the difference by groups, between the corrected φ of the two systems. For stars common to both the difference is 0".34, indicating a close conformity to the system, for the outstanding stars in 303.

TABLE VI.

COMPARISON OF LATITUDES FROM AUWERS' B. J. AND AUWERS' 303.

	AUWERS' B. J.					AUWERS' 303.					
Decl.	No.	Mean.	Obs. φ	Corr. φ	v	No.	Mean.	Obs. φ	Corr. φ	v	Δ
° °		°	"	"	"		°	"	"	"	"
0–5	24	– 2.5	25.64	25.48	+0.19	33	– 2.8	25.88	25.71	0.00	–0.23
– 5–10	26	– 7.6	25.59	25.39	+ .10	29	– 7.5	26.00	25.80	+ .09	– .41
– 10–15	20	– 12.7	25.56	25.32	+ .03	28	– 12.1	25.98	25.75	+ .04	– .43
– 15–20	26	– 16.8	25.49	25.21	– .08	32	– 17.7	25.75	25.46	– .25	– .25
– 20–25	20	– 22.4	25.56	25.22	– .07	26	– 22.6	26.20	25.85	+ .14	– .63
– 25–32	13	– 28.5	25.37	24.92	– .37						
Sum	129					148					
Means		– 13.7	25.55	25.29			– 12.2	25.95	25.71		–0.38

(5) **The Circumpolar Stars.** TABLE VII. This table gives AUWERS' corrected places of the 48 Circumpolar stars, which have been used here for meridian circle work since 1893. Two stars were not observed in this series, and 38 only have been observed at both culminations.

The mean corrections to the A. G. C. applied by Dr. AUWERS for this list are: $+0^s.006 \sec\delta$ and $-0''.01$; while the average corrections are: $\pm 0^s.023 \sec\delta$ and $\pm 0''.25$.

The correction to the Poulkova Refractions has been included in the Declination differences. This gives a larger plus correction to the adopted Declinations than is given by the use of the Poulkova Refractions unchanged.

The last column, $\frac{1}{2}\Delta$, indicates the correction to the system of Southern stars, used as fundamental in the observation of these Declinations.

The results of this table should be combined with those of the following one, for full comprehension of the details.

TABLE VIII. The Observed φ of this table is that obtained by the use of the Poulkova Refractions unchanged. The latitude from 38 circumpolars observed at both culminations would be $37^\circ\ 20'\ 25''.39$; and the mean correction to the circumpolar Declinations would be $+0''.10$.

The corrected φ and φ_0 include the computed change in the Refraction, and $\Delta\varphi$ and $\Delta\varphi_0$ are derived from these corrected values. The Latitude is increased to $25''.72$, and the mean correction to the Declinations is increased to $+0''.26$; this last being derived from the Latitude observations, without the adoption of any fundamental system of Declinations.

The residuals of φ_0, $\Delta\varphi_0$, and mean φ_0 are larger than the Latitude results, uncorrected for the Variation.

The number of observations ranges from 2 to 26 for a single culmination, with an average of 6. The maximum is 36 for a star observed at both culminations, with an average of 13.

The probable error of the Latitude from this series, $37^\circ\ 20'\ 25''.72$, appears to be less than $\pm 0''.03$.

TABLE VII.

CIRCUMPOLAR STARS. OBSERVED CORRECTIONS.

Star	AUWERS' Places. R. A. 1900.0.	Decl. 1900.0.	U. C. Obs. − A.	U. C. Reduced.	L. C. Obs. − A.	L. C. Reduced.	U. C. Obs. − A.	L. C. Obs. − A.	½ Δ
	h m s	° ′ ″	s	s	s	s	″	″	″
21 Cass.	0 39 2.25	74 26 29.03	. .	. .	+0.08	+.022 sec δ	. .	+0.88	. .
43 H. Ceph.	0 55 1.58	85 43 14.51	−0.03	−.002 sec δ	− .07	−.005 "	−0.03	− .02	−0.01
α Urs. Min.	1 22 33.51	88 46 26.60	+ .48	+.011 "	. .	. .	− .47	. .	. .
40 Cass.	1 30 30.95	72 31 49.19	+ .01	+.003 "	− .06	−.018 "	+ .37	+ .08	+ .14
50 Cass.	1 54 53.17	71 56 14.65	+ .03	+.009 "	− .01	−.003 "	+ .68	+ .16	+ .26
36 H. Cass.	2 28 30.95	72 22 51.14	− .02	−.006 "	+ .05	+.015 "	+ .89	+ .74	+ .08
47 H. Ceph.	2 52 46.62	79 1 25.15	− .04	−.008 "	. .	. .	− .28	. .	. .
48 H. Ceph.	3 7 37.10	77 22 2.82	. .	. .	. .	. .	. .	. .	. .
5 H. Cam.	3 39 47.78	71 1 27.05	− .15	−.050 "	− .04	−.013 "	− .01	+ .10	− .05
Gr. 750	4 5 5.66	85 17 28.61	+ .06	+.005 "	+ .07	+.006 "	− .06	− .04	− .01
Gr. 848	4 35 22.17	75 45 33.37	. .	. .	+ .04	+.010 "	. .	+ .19	. .
19 H. Cam.	5 6 4.08	79 6 59.06	+ .11	+.021 "	+ .07	+.013 "	− .05	+ .49	− .27
Gr. 966	5 26 20.94	74 58 39.69	+ .03	+.008 "	+ .01	+.003 "	+ .41	+ .91	− .25
22 H. Cam.	6 7 49.66	69 21 18.53	− .01	−.003 "	+ .02	+.007 "	− .03	+ .50	− .23
23 H. Cam.	6 29 10.22	79 40 22.14	+ .06	+.011 "	− .07	−.013 "	+ .51	− .04	+ .27
51 H. Ceph.	6 53 44.28	87 12 20.27	. .	. .	. .	. .	. .	. .	. .
Gr. 1374	7 48 13.84	74 11 6.46	+ .08	+.022 "	+ .03	+.008 "	+ .06	+ .25	− .09
Br. 1147	8 6 59.13	76 3 44.12	+ .11	+.026 "	+ .04	+.010 "	− .11	+ .12	− .11
1 H. Draco.	9 22 51.15	81 46 6.87	+ .22	+.031 "	+ .01	+.001 "	+ .91	− .49	+ .70
d Urs. Maj.	9 25 38.80	70 16 12.09	. .	. .	+ .01	+.003 "	. .	+ .36	. .
Gr. 1586	9 49 27.00	73 21 18.30	+ .01	+.003 "	+ .03	+.009 "	+ .26	+ .53	− .13
9 H. Draco.	10 26 36.23	76 13 41.48	+ .05	+.012 "	− .05	−.012 "	+ .17	− .12	+ .14
λ Draco.	11 25 28.31	69 52 58.75	.00	.000 "	− .03	−.010 "	− .18	− .18	.00
4 H. Draco.	12 7 31.05	78 10 18.83	.00	.000 "	− .17	−.034 "	− .08	+ .31	− .19
κ Draco.	12 29 12.98	70 20 21.84	+ .04	+.013 "	+ .04	+.013 "	+ .68	+ .58	+ .05
Gr. 2001	13 23 35.00	72 54 38.43	− .01	−.003 "	.00	.000 "	+ .30	+ .59	− .14
4 Urs. Min.	14 9 13.94	78 1 2.53	− .01	−.002 "	+ .01	+.002 "	+ .07	− .21	+ .14
β Urs. Min.	14 50 59.56	74 33 50.84	− .05	−.013 "	+ .01	+.003 "	+ .46	+ .59	− .06
γ Urs. Min.	15 20 53.01	72 11 23.16	− .06	−.019 "	− .07	−.022 "	+ .49	+ .44	+ .02
ζ Urs. Min.	15 47 37.28	78 6 7.86	+ .02	+.004 "	. .	. .	− .46	. .	. .
19 Urs. Min.	16 13 40.19	76 7 45.76	− .01	−.002 "	+ .02	+.005 "	+ .37	− .58	+ .47
A. Draco.	16 28 10.55	68 59 4.07	− .01	−.004 "	− .02	−.007 "	+ .31	+ .63	− .16
ε Urs. Min.	16 56 12.18	82 12 7.74	+ .11	+.015 "	+ .11	+.015 "	+ .22	+ .04	+ .09
ψ Dr. Aus.	17 43 42.90	72 11 52.54	.00	.000 "	+ .01	+.003 "	+ .14	+ .49	− .17
35 Draco.	17 53 55.49	76 58 33.95	− .01	−.002 "	+ .13	+.030 "	+ .21	+ .60	− .19
δ Urs. Min.	18 4 32.71	86 36 47.75	+ .09	+.005 "	. .	. .	+ .19	. .	. .
χ Draco.	18 22 51.59	72 41 21.86	+ .02	+.006 "	+ .14	+.042 "	+ .95	− .12	+ .53
τ Draco.	19 17 28.68	73 10 11.45	.00	.000 "	− .04	−.012 "	+ .72	+ .46	+ .13
λ Urs. Min.	19 22 30.10	88 59 15.89	+ .19	+.003 "	− .16	−.003 "	− .55	− .37	− .09
ε Draco.	19 48 30.81	70 0 47.32	− .06	−.020 "	+ .02	+.007 "	+ .96	+ .97	− .01
χ Ceph.	20 12 15.71	77 24 37.09	+ .04	+.008 "	+ .08	+.017 "	− .11	+ .17	− .14
73 Draco.	20 32 49.83	74 36 42.87	− .02	−.005 "	+ .02	+.005 "	− .11	− .14	+ .01
76 Draco.	20 49 50.53	82 9 39.97	− .04	−.006 "	+ .03	+.004 "	+ .51	+ .27	+ .12
Br. 2777	21 7 30.25	77 43 14.95	+ .08	+.017 "	+ .06	+.013 "	− .42	.00	− .21
β Ceph.	21 27 22.27	70 7 17.78	− .14	−.047 "	. .	. .	+ .64	. .	. .
24 Ceph.	22 7 53.16	71 50 54.46	− .01	−.003 "	+ .01	+.003 "	+ .32	+1.05	− .36
π Ceph.	23 4 42.91	74 50 48.50	+ .02	+.005 "	+ .09	+.023 "	− .01	+ .51	− .26
γ Ceph.	23 35 14.40	77 4 27.01	− .06	−.013 "	− .05	−.011 "	+ .41	+1.07	− .33

48 stars: 46 stars observed.

Mean 43 stars U. C.	+0.001 sec δ	+0.21	
Mean 41 stars L. C.	+0.003 sec δ	+0.29	
Mean 38 stars U. C., 38 stars L. C.		+0.25	+0.27 −0.01
Average corrections		±0.35	±0.40
Mean v		±0.32	±0.34 ±0.17

TABLE VIII.

LATITUDE FROM CIRCUMPOLAR STARS. SEPTEMBER, 1898, TO JUNE, 1900.

Star.	U. C. No.	U. C. Obs. φ	U. C. Corr. φ	U. C. φ_0	L. C. No.	L. C. Obs. φ	L. C. Corr. φ	L. C. φ_0	U. C. – L. C. $\Delta\varphi$	U. C. – L. C. $\Delta\varphi_0$	Mean. Corr. φ	Mean. φ_0
		″	″	″		″	″	″	″	″	″	″
21 Cass.	.	. .	. .	. .	2	26.25	26.75	26.51	. .	. .	. .	. .
43 H. Ceph.	10	25.43	25.65	25.93	16	25.32	25.63	25.44	+0.02	+0.49	25.64	25.68
α Urs. Min.	4	25.65	25.90	26.16	.	. .	. .	. .	. .	. .	. .	. .
40 Cass.	4	25.39	25.53	25.79	6	24.93	25.49	25.30	+ .04	+ .49	25.51	25.55
50 Cass.	6	24.85	24.99	25.22	4	25.02	25.59	25.39	− .60	− .17	25.29	25.30
36 H. Cass.	2	25.01	25.15	25.42	8	26.01	26.57	26.40	−1.42	− .98	25.86	25.91
47 H. Ceph.	2	25.86	26.04	26.30	.	. .	. .	. .	. .	. .	. .	. .
48 H. Ceph.	.	. .	. .	. .	.	. .	. .	. .	. .	. .	. .	. .
5 H. Cam.	2	25.08	25.21	25.41	10	25.03	25.63	25.47	− .42	− .06	25.42	25.44
Gr. 750	8	25.28	25.50	25.61	4	25.36	25.67	25.55	− .17	+ .06	25.58	25.58
Gr. 848	.	. .	. .	. .	6	25.54	26.01	25.87	. .	. .	. .	. .
19 H. Cam.	7	25.40	25.58	25.69	6	25.93	26.33	26.24	− .75	− .55	25.96	25.97
Gr. 966	6	25.21	25.36	25.41	4	25.96	26.45	26.37	−1.09	− .96	25.90	25.89
22 H. Cam.	13	25.49	25.61	25.64	10	25.51	26.18	26.12	− .57	− .48	25.90	25.88
23 H. Cam.	5	25.32	25.50	25.46	2	25.57	25.96	25.87	− .46	− .41	25.73	25.66
51 H. Ceph.	.	. .	. .	. .	.	. .	. .	. .	. .	. .	. .	. .
Gr. 1374	5	25.50	25.65	25.53	8	25.33	25.84	25.79	− .19	− .26	25.74	25.66
Br. 1147	8	25.45	25.61	25.58	14	25.54	26.00	26.08	− .39	− .50	25.81	25.83
1 H. Draco.	4	24.86	25.06	24.97	2	25.16	25.52	25.74	− .46	− .77	25.29	25.36
d Urs. Min.	.	. .	. .	. .	4	25.64	26.27	26.38	. .	. .	. .	. .
Gr. 1586	10	25.40	25.55	25.40	26	25.39	25.92	26.10	− .37	− .70	25.73	25.75
9 H. Draco.	4	25.53	25.69	25.51	7	25.34	25.80	25.99	− .11	− .48	25.75	25.75
λ Draco.	24	25.75	25.88	25.72	6	25.14	25.78	26.02	+ .10	− .30	25.83	25.87
4 H. Draco.	12	25.48	25.65	25.43	4	25.58	26.00	26.18	− .35	− .75	25.82	25.80
$\varkappa$ Draco.	2	25.10	25.23	24.97	4	25.38	26.01	26.27	− .78	−1.30	25.62	25.62
Gr. 2001	6	25.03	25.17	24.98	8	25.68	26.22	26.49	−1.05	−1.51	25.70	25.74
4 Urs. Min.	4	25.54	25.71	25.51	2	25.07	25.49	25.72	+ .22	− .21	25.60	25.61
β Urs. Min.	6	24.91	25.06	24.91	2	26.19	26.69	26.91	−1.63	−2.00	25.87	25.91
γ Urs. Min.	2	24.99	25.13	24.98	8	25.53	26.09	26.33	− .96	−1.35	25.61	25.66
ζ Urs. Min.	4	25.77	25.94	25.78	.	. .	. .	. .	. .	. .	. .	. .
19 Urs. Min.	4	24.94	25.10	24.96	2	24.66	25.12	25.35	− .02	− .39	25.11	25.15
A Draco.	4	25.44	25.56	25.44	6	25.54	26.22	26.30	− .66	− .86	25.89	25.87
ε Urs. Min.	6	25.28	25.48	25.36	9	25.25	25.60	25.65	− .12	− .29	25.54	25.51
ψ Dr. Aus.	8	25.31	25.45	25.38	2	25.46	26.02	26.21	− .57	− .83	25.74	25.79
35 Draco.	6	25.13	25.30	25.27	9	25.97	26.41	26.36	−1.11	−1.09	25.85	25.82
δ Urs. Min.	6	25.45	25.68	25.59	.	. .	. .	. .	. .	. .	. .	. .
χ Draco.	4	24.49	24.63	24.52	4	25.21	25.76	25.79	−1.13	−1.27	25.20	25.15
τ Draco.	4	25.02	25.17	25.18	4	25.50	26.03	26.12	− .86	− .94	25.60	25.65
λ Urs. Min.	2	25.70	25.95	25.82	6	25.26	25.53	25.41	+ .42	+ .41	25.74	25.62
ε Draco.	4	24.87	25.00	24.91	4	26.05	26.69	26.78	−1.69	−1.87	25.84	25.84
χ Ceph.	12	25.66	25.83	25.90	6	25.13	25.56	25.54	+ .27	+ .36	25.70	25.72
73 Draco.	4	25.94	26.09	26.19	6	25.26	25.76	25.59	+ .33	+ .60	25.92	25.89
76 Draco.	6	25.16	25.36	25.50	5	25.62	25.97	25.78	− .61	− .28	25.67	25.64
Br. 2777	7	26.04	26.21	26.38	2	25.63	26.06	25.98	+ .15	+ .40	26.13	26.18
β Ceph.	2	25.21	25.34	25.55	.	. .	. .	. .	. .	. .	. .	. .
24 Ceph.	9	25.39	25.53	25.71	2	25.72	26.30	26.06	− .77	− .35	25.92	25.89
π Ceph.	12	25.69	25.84	26.09	12	25.81	26.30	26.10	− .46	− .01	26.07	26.09
γ Ceph.	8	25.08	25.25	25.50	8	26.22	26.66	26.54	−1.41	−1.04	25.95	26.02
46 stars	268				260							
Mean 43 U. C.		25.33	25.49	25.50								
v		±0.27	±0.27	±0.30								
Mean 41 L. C.						25.50	26.00	26.00				
v						±0.29	±0.31	±0.33				
Mean 38 stars		25.29	25.45	25.45		25.48	25.97	25.98	−0.52	−0.53	25.71	25.72
v									±0.44	±0.51	±0.17	±0.18

TABLE IX. This gives the circumpolar Latitudes in groups of 5°, for the indication of the variation with zenith distance. The observed φ has been obtained with the Poulkova Refractions unchanged. There is a slight variation, indicating that the Refractions are too large, if the Declinations are subject to no error.

The variation is more decided in the column of corrected φ, indicating that the evidence of the circumpolar observations, alone, is against the computed change.

TABLE IX.

LATITUDE FROM CIRCUMPOLAR STARS, IN ORDER OF ZENITH DISTANCE.

Decl.		No.	Mean.	Obs. φ	φ_o	Corr. φ	φ_o
° °			°	"	"	"	"
70–75	U. C.	21	72.3	25.23	25.23	25.37	25.37
75–80	U. C.	11	77.5	25.41	25.39	25.58	25.56
80–85	U. C.	3	82.1	25.10	25.08	25.30	25.28
85–90	U. C.	3	87.3	25.47	25.56	25.71	25.80
85–90	L. C.	3	87.3	25.31	25.17	25.60	25.46
80–85	L. C.	3	82.1	25.34	25.37	25.68	25.71
75–80	L. C.	11	77.5	25.51	25.55	25.94	25.98
70–75	L. C.	21	72.3	25.51	25.52	26.07	26.08
Mean of both:							
70–75	M.	21	72.3	25.37	25.37	25.72	25.72
75–80	M.	11	77.5	25.46	25.47	25.76	25.77
80–85	M.	3	82.1	25.22	25.22	25.49	25.49
85–90	M.	3	87.3	25.39	25.37	25.65	25.63
Means.	U. C.	38	75.7	25.29	25.29	25.45	25.45
	L. C.	38	75.7	25.48	25.49	25.97	25.98
	Both Culs.			25.39	25.39	25.71	25.72

TABLE X. This contains a statement of the foregoing comparisons, in condensed form; the separate values by night of observation, being also included. For each night there were generally two pairs of Circumpolar stars, and eight Southern stars.

The means of the groups of Southern stars, as observed, vary from $-7°$ to $-21°$, with an average of $-14°$. The greater part lie between $-10°$ and $-18°$.

TABLE X.

COMPARISON OF LATITUDES FROM CIRCUMPOLAR STARS AND SOUTHERN STARS.

By Nights, 144:											
CIRCUMPOLAR STARS.			MEAN.			AUWERS' 303 STARS.			AUWERS' B. J. STARS.		
U. C.	L. C.	U. – L.	Obs. φ	Corr. φ	φ_o	Obs. φ	Corr. φ	φ_o	Obs. φ	Corr. φ	φ_o
"	"	"	"		"	"		"	"		"
25.39	25.54	–0.15	25.47		25.47	25.92		25.92	25.57		25.57
25.55	26.02	–0.47		25.79	25.79		25.67	25.67		25.32	25.32
By Stars:											
43	41										
"	"	"	"		"						
25.33	25.50	–0.17	25.41		25.41						
25.49	26.00	–0.51		25.75	25.75						
38 Stars, both culminations:							148			129	
25.29	25.48	–0.19	25.39		25.39	25.95		25.96	25.55		25.58
25.45	25.97	–0.52		25.71	25.72		25.71	25.72		25.29	25.32

TABLE XI. The full series of results for Latitude are given in this table, derived by the use of the Poulkova Refractions, unchanged. The circumpolar results are, in general, the means of two pairs of stars at upper and lower culminations. For most of the nights, eight South stars have been included. When observation extended beyond four hours, the number is larger; and a few shorter nights have been included in the series of 144.

The Temperature and Barometer are tabulated for the purpose of indicating the usual conditions, and their range, and for the discussion of any effect upon the Refraction, due to meteorological conditions. Leaving aside the errors of the adopted Declinations, the employment of larger Refraction corrections would diminish the Latitudes from North stars, and increase the Latitudes from South stars. The result would be to increase the negative difference (N—S) as given in the table. By diminishing the Refraction corrections, the opposite effect is produced, and the difference (N—S) of the table would be reduced.

The mean φ of the table is nearly free from the effect of erroneous Refraction corrections, since the two sets of stars are situated at nearly the same distance on opposite sides of the zenith. And we find, in effect, that the value of φ, with the change in Refraction included, is here very nearly reproduced.

The Δ (N—S) of the table is independent of errors of Nadir reading, and may be taken to represent the combined errors of Refraction, and of Declination, in so far as observation can give them.

The residuals are not diminished by the correction for the Latitude Variation.

The probable error of the final Latitude, 37° 20′ 25″.71, from this series, would appear to be less than ±0″.02.

Following the table of Latitude results, there are given the monthly means, and range, of the temperature and barometer, at the times of observation. The nights are also tabulated with respect to temperature, in groups of 10° Fahr., of which, however, the first extends from 28° to 39°. There is indicated an effect upon $\Delta\varphi$ of —0″.034 for 10° rise in temperature. Tabulating with respect to the barometer readings, in groups containing 0.1 inch of range for the two middle groups, and 0.17 and 0.19 for the first and last, respectively, there is indicated a rate of +0″.057 for each tenth of an inch rise in barometer.

Since the temperature and barometer are seen by these tables to rise, in general, together, it follows that they usually counterbalance each other in part, in their effect upon the Refraction. And the indicated effects are of small size, aside from the difficulty of separating them from each other.

TABLE XI.

Observations of Latitude.

Date. 1898.	C. P.	South.	Δ	Mean.	φ_o	t.	Bar.
	″	″	″	″	″	°	
Sept. 6	25.06	26.17	−1.11	25.61	25.80	70	25.92
7	25.12	25.84	− .72	25.48	25.67	65	.88
13	24.91	26.35	−1.44	25.63	25.84	61	.80
14	24.95	25.80	−0.85	25.38	25.59	64	.80
15	25.20	26.14	−0.94	25.67	25.89	68	.84
16	25.08	26.37	−1.29	25.72	25.94	72	.87
19	25.86	26.09	−0.23	25.98	26.21	58	.84
20	25.31	26.33	−1.02	25.82	26.05	57	.86
23	26.55	26.68	−0.13	26.61	26.85	50	.69
28	25.50	26.48	−0.98	25.99	26.23	51	.77
29	26.00	26.59	−0.59	26.30	26.55	52	.77
Oct. 4	26.00	26.20	−0.20	26.10	26.36	46	.89
5	25.71	26.01	−0.30	25.86	26.12	49	.86
12	25.30	26.55	−1.25	25.92	26.19	62	.94
13	25.54	25.98	−0.44	25.76	26.03	65	.91
17	25.77	25.42	+0.35	25.60	25.87	65	.93
18	25.57	25.58	−0.01	25.57	25.84	61	.78
19	25.20	25.70	−0.50	25.45	25.72	65	.86
20	25.70	25.79	−0.09	25.75	26.02	64	.93
25	25.91	25.74	+0.17	25.82	26.10	59	.99
26	25.73	25.93	−0.20	25.83	26.11	53	.99
27	25.29	25.40	−0.11	25.34	25.61	62	.95
Nov. 1	25.46	25.79	−0.33	25.63	25.90	62	.93
3	24.81	26.67	−1.86	25.74	26.01	51	.94
9	25.63	25.91	−0.28	25.77	26.03	50	.92
10	25.57	26.25	−0.68	25.91	26.17	43	.74
14	25.74	25.74	.00	25.74	25.99	51	.85
15	25.61	25.67	−0.06	25.64	25.89	50	.81
16	24.87	25.99	−1.12	25.43	25.68	49	.93
25	25.49	26.30	−0.81	25.90	26.13	40	.75
28	24.30	25.53	−1.23	24.91	25.13	47	.82
30	25.31	26.18	−0.87	25.75	26.20	40	.89
Dec. 1	25.32	25.54	−0.22	25.43	25.65	47	.99
2	25.50	25.45	+0.05	25.47	25.68	54	26.00
9	25.69	26.15	−0.46	25.92	26.12	31	25.72
12	25.44	25.43	+0.01	25.44	25.63	43	.88
15	25.34	26.07	−0.73	25.70	25.87	40	.79
16	25.33	25.84	−0.51	25.59	25.76	43	.85
22	26.11	26.31	−0.20	26.21	26.36	46	.97
23	25.42	25.68	−0.26	25.55	25.70	45	26.19
27	25.25	25.78	−0.53	25.51	25.65	56	25.96
30	25.60	26.04	−0.44	25.82	25.95	28	.96
1899.							
Jan. 20	25.48	26.14	−0.66	25.81	25.87	53	26.09
23	25.82	25.61	+0.21	25.71	25.76	48	.11
26	25.77	26.35	−0.58	26.06	26.10	57	25.95
27	25.50	25.30	+0.20	25.40	25.43	56	.95
28	25.14	25.71	−0.57	25.42	25.45	55	.90
30	25.65	26.23	−0.58	25.94	25.96	50	.80
Feb. 6	24.61	25.55	−0.94	25.08	25.06	30	26.00
7	24.87	25.56	−0.69	25.22	25.20	41	.10
8	25.37	25.69	−0.32	25.53	25.51	47	.06
9	25.45	25.66	−0.21	25.56	25.53	46	25.96
10	25.38	26.10	−0.72	25.74	25.71	48	.86
13	25.55	26.03	−0.48	25.79	25.75	46	.97
14	25.33	25.55	−0.22	25.44	25.39	47	.96
15	24.49	26.96	−1.47	25.72	25.67	44	.92
16	24.92	25.87	−0.95	25.40	25.34	50	26.05
21	25.51	26.27	−0.76	25.89	25.81	51	25.84
22	25.61	26.25	−0.64	25.93	25.85	51	.82
24	24.92	25.46	−0.54	25.19	25.10	33	.67
Mar. 3	26.02	26.76	−0.74	26.39	26.27	40	26.02
4	26.03	26.29	−0.26	26.16	26.04	50	.05
6	25.02	25.53	−0.51	25.27	25.14	56	25.89
7	25.61	26.47	−0.86	26.04	25.91	44	.83
10	25.49	26.15	−0.66	25.82	25.68	32	.82
11	25.60	26.34	−0.74	25.97	25.83	34	.78
April 3	25.72	25.80	−0.08	25.76	25.54	51	.94
4	25.85	26.36	−0.51	26.10	25.88	52	.83

Date. 1899.	C. P.	South.	Δ	Mean.	φ_o	t.	Bar.
	″	″	″	″	″	°	
April 5	25.72	25.80	−0.08	25.76	25.54	53	25.94
6	26.11	25.65	+0.46	25.88	25.66	61	.98
7	25.42	25.81	−0.39	25.62	25.39	61	.96
10	25.37	25.65	−0.28	25.51	25.28	52	.83
12	25.42	26.15	−0.73	25.78	25.54	47	.76
13	25.37	25.90	−0.53	25.64	25.40	53	.83
14	25.93	25.68	+0.25	25.80	25.56	58	.90
17	25.39	25.32	+0.07	25.36	25.12	38	.68
18	25.07	26.28	−1.21	25.67	25.43	42	.80
19	26.23	25.94	+0.29	26.09	25.85	58	.90
20	25.35	26.00	−0.65	25.67	25.43	59	.94
28	25.49	25.80	−0.31	25.65	25.39	38	.72
29	25.82	26.15	−0.33	25.98	25.72	37	.80
May 2	25.36	26.11	−0.75	25.74	25.48	40	.87
4	25.48	26.00	−0.52	25.74	25.48	41	.67
5	25.62	26.32	−0.70	25.97	25.71	39	.66
July 14	25.47	25.84	−0.37	25.66	25.53	68	.80
17	25.27	25.44	−0.17	25.35	25.22	77	26.00
18	24.89	25.49	−0.60	25.19	25.07	78	25.96
20	25.02	25.90	−0.88	25.46	25.34	65	.83
21	25.02	26.09	−1.07	25.56	25.45	63	.84
24	25.15	25.82	−0.67	25.48	25.38	72	.85
25	25.46	26.23	−0.77	25.84	25.74	67	.87
27	25.27	26.35	−1.08	25.81	25.72	67	.86
31	25.13	25.78	−0.65	25.46	25.38	64	.80
Aug. 1	26.03	26.63	−0.60	26.33	26.25	63	.85
7	25.33	26.27	−0.94	25.80	25.75	58	.78
8	25.65	26.01	−0.36	25.83	25.78	60	.83
9	25.95	25.80	+0.15	25.88	25.84	62	.90
10	25.72	25.91	−0.19	25.81	25.77	60	.85
14	24.68	25.93	−1.25	25.31	25.29	52	.78
15	25.10	25.52	−0.42	25.31	25.29	55	.81
18	25.55	25.92	−0.37	25.74	25.74	55	.81
21	25.26	26.22	−0.96	25.74	25.74	55	.79
22	25.34	25.59	−0.25	25.46	25.47	62	.86
24	25.68	25.59	+0.09	25.64	25 66	59	.83
25	25.73	26.11	−0.38	25.92	25.94	60	.81
Sept. 4	26.23	26.32	−0.09	26.27	26.32	48	.78
5	26.13	26.36	−0.23	26.25	26.31	54	.87
6	25.86	25.88	−0.02	25.87	25.94	59	.89
7	25.71	25.88	−0.17	25.79	25.86	63	.86
11	25.43	26.10	−0.67	25.77	25.86	75	26.03
12	25.88	25.78	+0.10	25.83	25.92	74	.02
14	25.77	25.96	−0.19	25.86	25.95	64	25.75
15	25.40	25.84	−0.44	25.62	25.72	67	.91
18	25.31	26.13	−0.82	25.72	25.83	74	26.00
19	25.96	25.84	+0.12	25.90	26.01	76	.03
26	25.43	25.86	−0.43	25.65	25.78	73	.02
1900.							
April 9	26.12	26.27	−0.15	26.19	26.10	38	25.85
16	25.62	24.99	+0.63	25.31	25.20	54	.85
17	25.46	25.83	−0.37	25.64	25.53	56	.84
18	25.49	25.77	−0.28	25.63	25.52	52	.76
27	25.58	25.78	−0.20	25.68	25.55	46	.63
May 7	26.42	26.21	+0.21	26.31	26.18	47	.88
8	26.28	25.90	+0.38	26.09	25.95	53	.87
14	25.78	25.91	−0.13	25.85	25.70	57	.91
15	24.75	25.82	−1.07	25.28	25.13	52	.91
16	25.35	25.93	−0.58	25.64	25.48	51	.87
17	25.29	25.89	−0.60	25.59	25.44	57	.78
18	25.76	26.06	−0.30	25.91	25.76	52	.72
21	26.03	26.16	−0.13	26.09	25.93	61	.84
22	25.69	26.24	−0.55	25.97	25.81	54	.74
24	25.16	25.20	−0.04	25.18	25.02	51	.82
25	25.16	26.28	−1.12	25.72	25.56	48	.86
28	25.13	25.37	−0.24	25.25	25.09	56	.85
29	25.56	25.08	+0.48	25.32	25.16	57	.87
30	25.06	25.89	−0.83	25.47	25.31	61	.85

Date. 1900.	C. P.	South.	Δ	Mean.	φ_o	t.	Bar.
	″	″	″	″	″	°	
June 4	24.95	25.96	−1.01	25.46	25.30	65	25.88
5	24.98	25.42	−0.44	25.20	25.04	72	.95
19	25.31	25.79	−0.48	25.55	25.39	61	.90
23	25.09	26.01	−0.92	25.55	25.39	57	.79
24	25.61	26.13	−0.52	25.87	25.71	56	.83
25	25.10	26.27	−1.17	25.68	25.52	55	.88
26	25.58	25.67	−0.09	25.63	25.47	67	.83
27	25.66	26.52	−0.86	26.09	25.93	64	.82
28	25.31	25.79	−0.48	25.55	25.40	66	.82
144 nights.							
Means	″ 25.47	″ 25.95	″ −0.48	″ 25.71	″ 25.71	° 54.4	25.870
v	±0.29	±0.28	±0.35	±0.22	±0.27		
Corr. M.	25.79	25.70	+0.09	25.74	25.74		

MONTHLY TEMPERATURE AND BAROMETER AT TIME OF OBSERVATION.

Month.	Nights.	Range.	Mean.	Range.	Mean.
January	6	48°–57°	53°	25.80–26.11	25.97
February	12	30 –51	45	.67– .10	.92
March	6	32 –56	43	.78– .05	.90
April (2)	20	37 –61	50	.63–25.95	.84
May	17	39 –61	52	.66– .91	.82
June	9	55 –72	63	.79– .95	.86
July	9	63 –78	69	.80–26.00	.87
August	12	52 –63	58	.78–25.90	.83
September (2)	22	48 –76	63	.69–26.03	.87
October	11	46 –65	60	.78–25.99	.91
November	10	40 –62	54	.74– .94	.95
December	10	28 –54	43	25.72–26.19	.93
Monthly Means	10	43 –63	54	25.74–26.01	25.89
Total Range		28 –78		25.63–26.19	

TEMPERATURE GROUPS.

No.	Temp.	Bar.	$\Delta\varphi$
11	34°.4	25.788	−0″.47
31	44 .5	.864	.55
55	54 .1	.867	.40
36	63 .5	.862	.49
11	73 .9	.968	.54
144	54°.4	25.870	−0″.48

BAROMETER GROUPS.

No.	Bar.	Temp.	$\Delta\varphi$
26	25.740	47°.4	−0″.54
65	.844	55 .5	.55
37	.940	56 .5	.38
16	26.048	56 .7	.40
144	25.870	54°.4	−0″.48

Temperature rate, −0″.034 per 10°.
Barometer rate, +0 .057 per 0.1 inch.

(6) **The Catalogue Comparisons.** But little explanation will be required for these tabular results. The standards compared include:

AUWERS' corrected B. J. and 303. A. N. 3508–09 and 3511, 1898.

NEWCOMB'S Catalogue of Fundamental Stars; Volume VIII, Part II. Astronomical Papers Am. Eph., 1898.

BOSS, Standard Stars South of −20°. A. J. 448–50, 1898.

AUWERS' Fundamental Catalogue for the Southern Zone Observations. A. N. 3431–32, 1898.

Besides these, there is the extensive comparison with the Cordoba General Catalogue, which includes the entire PIAZZI list, with but few exceptions. The places taken from the catalogue are in general the mean of the yearly results, without regard to the number of observations in the separate years. They have been brought forward by use of the precession constants of PETERS and STRUVE, and where the proper motion has been determined, this has been included. There are undoubtedly many cases of proper motion, usually small, not hitherto noted. And the comparison may be expected to indicate the systematic difference, due to the component of the solar motion.

There are probably systematic differences in the Cordoba results, between the separate yearly determinations, both in Right Ascension and Declination. Attention has been called to these differences by Prof. BOSS, in the discussion of his standard stars, for the list above cited. But the effect of these differences may be expected to disappear, very nearly, in the mean of so large a number of comparisons.

It is no part of the present scheme to reduce any catalogue places to uniformity, but simply to present the results of observation at this time, and to indicate their general relation to existing material, which may be combined with this series for the problems of star positions and motions.

Finally, this series has been compared with the list of Fundamental stars, for 1895, in Volume IV, containing the first meridian circle work published here. This list is referred to as L. O. 310.

TABLE XII. This table reproduces the systematic difference, given by Dr. AUWERS in A. N. 3511, where the corrections to the original list of 303 are published. The $\Delta\delta$ should be compared with the residuals of B. J., in Tables V and VI, for indication of the conformity of the observations with the system.

TABLE XII.

COMPARISON OF STARS IN B. J. AND 303.

AUWERS' PLACES.				
Decl.	No.	Mean.	B. J. − 303.	
° °		°	s	″
0− 5	21	− 2.7	0.000	−0.19
− 5–10	24	− 7.9	.000	− .27
−10–15	17	−12.8	.000*	− .34
−15–20	22	−16.8	.000	− .40
−20–25	21	−22.5	.000	− .49
Sum	105			
Means		−12.4	0.000	−0.34
Auwers $\Delta\delta$ =		−0″.15	−0″.015 $\delta°$	

*Erratum in Auwers' corrections to 303: A. N. 3511, No. 60, $\Delta\alpha$ +0ˢ.016 in place of −0ˢ.016.

TABLE XIII. There are included here, only the PIAZZI stars which have been used as Fundamental, in the present series of observations. The results may consequently differ from those derived from a comparison of the complete lists of the two authorities.

There are no variations of consequence, with respect to the Right Ascension. With respect to the Declinations, both $\Delta\alpha$ and $\Delta\delta$ show decided rates.

The $\Delta\delta$ may be compared with that of Table XII, to indicate the agreement of NEWCOMB and 303, which last has been used as the fundamental system for these observations.

TABLE XIII.

COMPARISON OF AUWERS' B. J. FUNDAMENTAL STARS WITH NEWCOMB.

	By Hours.					Declination Groups.				
H.	No.	A – N	v	A – N	v	Decl.	No.	Mean.	A – N	A – N
		s	s	″	″	° °		°	s	″
0	3	– 0.049	– .020	– 0.44	+ .08	0– 5	24	– 2.5	– 0.041	– 0.38
1	6	– .018	+ .011	– .66	– .14					
2	7	– .032	– .003	– .47	+ .05	– 5–10	26	– 7.6	– .040	– .31
3	5	– .047	– .018	– .54	– .02					
4	4	– .027	+ .002	– .55	– .03	– 10–15	20	– 12.7	– .034	– .47
5	19	– .035	– .006	– .42	+ .10					
6	7	– .018	+ .011	– .51	+ .01	– 15–20	26	– 16.8	– .028	– .62
7	2	.000	+ .029	– .70	– .18					
8	3	– .022	+ .007	– .46	+ .06	– 20–25	18	– 22.4	– .021	– .75*
9	2	– .035	– .006	– .37	+ .15					
10	5	– .023	+ .006	– .59	– .07	– 25–31	12	– 28.2	– .017*	– .76
11	4	– .026	+ .003	– .48	+ .04					
12	5	– .043	– .014	– .46	+ .06	Sum	126			
13	4	– .024	+ .005	– .35	+ .17					
14	7	– .035	– .006	– .62	– .10	Means		– 13.4	– 0.032	– 0.52
15	6	– .034	– .005	– .55	– .03					
16	4	– .041	– .012	– .59	– .07					
17	5	– .025	+ .004	– .64	– .12					
18	3	– .024	+ .005	– .60	– .08					
19	3	– .028	+ .001	– .59	– .07					
20	7	– .038	– .009	– .53	– .01					
21	6	– .027	+ .002	– .52	.00					
22	9	– .035	– .006	– .49	+ .03					
23	3	– .022	+ .007	– .35	+ .17					
Sum	129									
Means		– 0.029	. .	– 0.54						
Hourly Means		– 0.029	± .008	– 0.52	± 0.08					

*One difference, + 0ˢ.17, has been omitted from the sixth group. Two differences of – 2″.40 and – 2″.32 have been omitted from the fifth group.

TABLE XIV. The first part of this table contains the comparison of the stars which are not in B. J. There is evidently a rate in $\Delta\alpha$, with respect to the Declination, similar to that of the comparison with B. J.; and the R. A. system of 303 is thus shown to conform to that of B. J., for stars which occur in 303 alone.

The second part of the table brings the stars, common to B. J. and 303, into the comparison, and the final $\Delta\alpha$ and $\Delta\delta$ represent the systematic differences of 303 and N., based upon 145 stars.

TABLE XIV.

Comparison of Stars in Newcomb and Auwers' 303.					Combination of B. J. — N and B. J. — 303.		
Decl.	No.	Mean.	303 – N.		No.	303 – N.	
		°	s	″		s	″
– 0– 5°	6	– 3.5	– 0.038	– 0.11	21	– 0.041	– 0.19
– 5–10	8	– 8.2	– .031	+ .07	24	– .040	– .04
– 10–15	10	– 12.1	– .023	– .23	17	– .034	– .13
– 15–20	7	– 17.5	– .018	– .21	22	– .028	– .22
– 20–25	9	– 22.4	+ .008	– .21	21	– .021	– .26
Sum	40				105		
Means		– 13.3	– 0.019	– 0.14	– 12.4	– 0.033	– 0.17

Final $\Delta\alpha$ 303 – N = – 0ˢ.029. Final $\Delta\delta$ 303 – N = – 0″.16. 145 stars.

TABLE XV. There are a small number of stars, only, available for the comparison with BOSS. The comparison with B. J. includes 13 stars common to both B. J. and 303. The comparison with 303 includes the same 13 stars, and 5 additional; that is, all the PIAZZI stars that are included in 303 and BOSS.

The Declination comparison represents, closely, the systematic difference between AUWERS' B. J. and AUWERS' 303, for this zone.

TABLE XV.

COMPARISON OF BOSS AND AUWERS.
$-20^\circ - 31^\circ$

	No.	Mean.	A.–B. $\Delta\alpha$	A.–B. $\Delta\delta$
Auwers' B. J.	23	$-25^\circ.8$	$-0^s.010$	$-0''.63$
Auwers' 303	18	-23.5	$-.006$	-0.11

(7) **Comparison of Observations with Catalogues.** These comparisons give the Observed $\Delta\delta$, resulting from the use of the Poulkova Refractions, unchanged; and the Corrected $\Delta\delta$, obtained by the corrected Refractions. When both Δ and v are given for the Declinations, the former is the average difference between observation and catalogue, without regard to sign, and the latter is the average residual from the mean difference of the entire set of stars.

TABLE XVI. This comparison does not include the stars which have been used as Fundamental, and which are compared with NEWCOMB in Tables XIII and XIV.

There is a decided variation of $\Delta\alpha$ with respect to Declination, similar to that between AUWERS and NEWCOMB, in the comparison of Table XIII. The mean difference (Obs. —N) down to -30° is in accord with that of the Fundamental stars. The adjusted variation of $\Delta\alpha$ has been tabulated, below, from the values of the direct comparison.

The increase in $\Delta\delta$, with the increasing Declinations, below -40°, indicates that a larger change in the Poulkova Refractions is necessary, to satisfy the standard places of NEWCOMB.

The increase in the average difference of observed and catalogue Declinations is not greater than should be anticipated. The probable error of the mean of two observations is not far from $1''.0$, at the extreme limit of the list.

TABLE XVI.

OBSERVED — NEWCOMB: DECLINATION GROUPS.

Decl.	No.	Mean.	$\Delta\alpha$	Reduced.	Obs. $\Delta\delta$	Corr. $\Delta\delta$	Δ	v
° °		°	s	s	"	"	"	"
0–10	34	− 4.3	−0.058	−0.058 sec δ	+0.05	−0.01	±0.44	±0.46
−10–20	26	−15.6	− .030	− .029 "	.00	+ .03	.44	.49
−20–30	31	−25.8	− .004	− .004 "	− .29**	− .13	.47	.44
−30–35	17	−32.9	+ .032	+ .027 "	− .50***	− .18	.54	.54
−35–40	19	−37.1	+ .018	+ .014 "	− .64	− .15	.61	.60
−40–43	17	−41.5	+ .007	+ .005 "	−1.74	− .70	.89	.81
−43–46.8	14	−44.4	+ .036*	+ .026 "	−3.13	− .84	1.26	1.17
Sum	158							
Means		−26.9	−0.009	−0.011 sec δ	−0.64	−0.21	±0.60	±0.59
To −30°			−0.031		−0.08	−0.04	±0.45	
Auwers' 303 − Newcomb			(−0.029)			(−0.16)		

Adjustment in Right Ascension.

0°	−0s.061	30°	−0s.001	43°	+0s.032
10	− .042	35	+ .011	46	+ .041
20	− .022	40	+ .024		

* One $\Delta\alpha$ + 0s.308 omitted. ** $\Delta\delta$ − 3".48 omitted. *** $\Delta\delta$ + 1".60 omitted.

TABLE XVII. This comparison includes the stars used as Fundamental, for which the results have been already given in Table XV. They form one third of the total number available, and lie mainly within the first two groups. The $\Delta\alpha$ appears to be constant throughout. The $\Delta\delta$ increases for the extreme Southern stars, indicating that the Refractions should be slightly diminished for these observations.

TABLE XVII.

OBSERVED — BOSS: DECLINATION GROUPS.

Decl.	No.	Mean.	$\Delta\alpha$	Obs. $\Delta\delta$	Corr. $\Delta\delta$	Δ	v
° °		°	s	"	"	"	"
−20–25	17	−23.2	+0.013	−0.33	−0.22	±0.37	±0.34
−25–30	22	−27.4	+ .020	− .13	+ .05	.36	.41
−30–35	10	−31.8	+ .015	− .31*	− .03	.35	.36
−35–40	13	−37.1	+ .016	− .60	− .12	.58	.54
−40–43	8	−41.5	+ .020	−1.39	− .35	.78	.74
−43–46.8	10	−44.1	+ .021	−2.60	− .51	.99	.92
Sum	80						
Means		−32.0	+0.017	−0.71	−0.16	±0.52	±0.51
Mean −20°–30°				−0.22	−0.07	±0.36	±0.38

*One $\Delta\delta$ +1".71 omitted.

TABLE XVIII. The first part of this table includes the comparison by hours of Right Ascension. The Observed $\Delta\delta$ has not been corrected for the change in the Poulkova Refractions. There is a marked difference in $\Delta\delta$, between the first and last twelve hours, amounting to half a second of arc, on the average.

The stars used as Fundamental are included in this comparison. They fall mainly within the first two Declination groups, of the second part of the table, and the mean systematic difference is given for these stars separately, 52 in number.

The variation of $\Delta\alpha$, with respect to the Declination, is similar to that found in the comparisons with NEWCOMB, Tables XIII and XVI. The variation has been adjusted at the foot of the table.

The change in the Poulkova Refractions, for the observations, appears to satisfy the extreme Southern stars quite well, if the mean $\Delta\delta$ be taken into account.

TABLE XVIII.

OBSERVED—AUWERS' SOUTHERN FUNDAMENTAL CATALOGUE: R. A. GROUPS.

R. A.	No.	Decl.	$\Delta\alpha$	Obs. $\Delta\delta$	R. A.	No.	Decl.	$\Delta\alpha$	Obs. $\Delta\delta$
h		°	s	"	h		°	s	"
0	9	−31.0	+0.035	−0.91	12	7	−30.4	+0.016	−0.50
1	6	31.4	+ .042	−1.34	13	9	35.1	+ .047	− .93
2	10	32.1	+ .070	−1.07	14	13	35.8	+ .052	− .90
3	9	32.0	+ .034	−1.37	15	9	33.3	+ .027	− .64
4	8	35.2	+ .049	−1.42	16	13	33.4	+ .023	− .21
5	10	31.8	+ .038	−0.87	17	15	32.5	+ .012	− .77
6	10	31.9	+ .028	−1.17	18	16	32.8	+ .052	− .69
7	10	32.9	+ .047	−1.48	19	13	31.5	+ .062	− .80
8	8	35.4	+ .053	−1.83	20	8	34.2	+ .033	− .89
9	6	34.4	+ .060	−0.68	21	8	29.8	+ .046	− .33
10	6	35.2	+ .057	−0.75	22	11	33.7	+ .027	− .91
11	8	32.8	+ .031	−1.02	23	12	30.0	+ .053	− .44
					Sum 234				
					Means		−32.8	+0.041	−0.88

OBSERVED — AUWERS' SOUTHERN FUNDAMENTAL CATALOGUE: DECLINATION GROUPS.

Decl.	No.	Mean.	$\Delta\alpha$	Reduced.	Obs. $\Delta\delta$	Corr. $\Delta\delta$	Δ	v
° °		°	s	s	"	"	"	"
−20–25	52	−22.8	+0.013	+0.012 sec δ	−0.48	−0.38	±0.45	±0.32
−25–30	42	−27.5	+ .030	+ .027 "	− .30	− .11	.39	.42
−30–35	41	−32.8	+ .049	+ .041 "	− .39*	− .09	.46	.51
−35–40	43	−37.3	+ .049	+ .039 "	− .68	− .19	.63	.62
−40–43	33	−41.5	+ .054	+ .041 "	−1.80	− .75	1.00	.80
−43–46.8	23	−44.7	+ .069	+ .048 "	−2.86	− .49	1.22	1.13
Sum	234							
Means		−32.8	+0.041	+0.032 sec δ	−0.89	−0.31	±0.63	±0.58
−20°–30°	94	−24.9	+0.021	+0.019 "	−0.40	−0.26	±0.42	±0.37
Auwers' 303 − A. S. F.			(+0.006)		(−0.29)			

Adjustment in Right Ascension.

20°	+0s.016	35°	+0s.043	43°	+0s.059
30	+ .033	40	+ .053	46	+ .068

*One $\Delta\delta$ +1".51 omitted.

TABLE XIX. The value of this comparison must be estimated with regard to the large number of stars used. The entire Fundamental list is available for the discussion of systematic differences, and since good values of the proper motion have been derived for all these stars, the results should be nearly free from its effect.

The first part of the tabulation, by hours of Right Ascension, gives the comparison between AUWERS' 303 standard, and the Cordoba places, brought forward from 1875, and corrected with AUWERS' proper motions.

There is a marked variation in $\Delta\alpha$, the group of twelve hours, from 4 to 15 inclusive, differing from the remaining group of twelve hours, by more than $0^s.05$ in the means. The maximum variation is nearly $0^s.11$.

The tabulation of the Observed places, by hours, shows the same variation, in the column of residuals of $\Delta\alpha$. But only a small portion of the stars observed have been corrected for proper motion, in the comparison.

In the comparison with 303 there is a large systematic difference in $\Delta\delta$. This may be due to the effect of Refraction, for if BESSEL'S Refractions are too large, the South Latitude of Cordoba, as derived from the Circumpolar stars, would be too small; and all Declinations deduced from zenith distances would require a negative correction. This would be of the form, $-c - r \tan z$, where c is the correction to the Latitude, and North zenith distance is reckoned as positive.

On the other hand, there may be systematic errors in the adopted proper motions, which would account for the variation in $\Delta\alpha$, and the large mean $\Delta\delta$, in part.

The means are derived from the total number of stars, without regard to the hourly groups.

The second part of the tabulation, by hours of Right Ascension, does not include any of the Fundamental stars, for which the comparison has been separately made.

The Observed $\Delta\alpha$ gives a negative mean, while the comparison of the Cordoba places, with AUWERS, gives a very small positive difference. That this change is not due to the deviation of the instrument here, from the meridian, will be apparent from the following portion of the table, where the $\Delta\alpha$ is combined with respect to Declination. The comparisons with NEWCOMB and AUWERS, in Tables XVI and XVIII, show a tendency of the Observed $\Delta\alpha$ to increase in a positive direction, with respect to those standards, for the greater Southern Declinations. The residuals of $\Delta\alpha$ have been taken out from the mean of the hourly groups, and the residuals of $\Delta\delta$ in a similar manner. The Observed $\Delta\delta$, in this comparison, has not been corrected for the change in the Poulkova Refractions. The variation in the mean Declination of the separate hourly groups would account for considerable differences in the values of the Observed $\Delta\delta$.

In the combination by groups of Declination, there are a large number of comparisons to each group, and it might have been more instructive had the groups been made of narrower extent. The $\Delta\alpha$, as already noted, does not conform to the comparison of the Fundamental stars very closely. As far as possible, known proper motions have been included, and a number of suspected cases have not been retained in the comparison.

The Declinations, down to $-30°$, appear to be in conformity with the Fundamental stars. The Observed $\Delta\delta$, as heretofore, has been obtained by the use of the Poulkova Refractions, unchanged, while the corrected Refractions have been applied in the results of the last column of the table. Allowing for the systematic difference, a slight decrease in the corrected Refractions is still required for these observations; and this is the more evident, since the lower Declinations are not far from the zenith of Cordoba, where the variable term of the correction to the Cordoba Declinations will be small.

TABLE XIX.

COMPARISON WITH CORDOBA GENERAL CATALOGUE: R. A. GROUPS.

	AUWERS' 303—C. G. C.			OBSERVED—C. G. C.					
	No.	$\Delta\alpha$	$\Delta\delta$	No.	Mean δ	$\Delta\alpha$	v	Obs. $\Delta\delta$	v
h		s	"		°	s	s	"	"
0	10	+0.035 sec δ	−0.55	84	−17.0	+0.007 sec δ	+.034	−1.08	−0.14
1	11	+ .016 "	− .51	50	−23.9	+ .010 "	+.037	−1.51	− .57
2	13	+ .018 "	− .93	67	−23.9	+ .046 "	+.073	−1.39	− .45
3	12	+ .002 "	−1.06	53	−29.8	− .001 "	+.026	−1.67	− .73
4	10	− .013 "	− .43	79	−22.4	− .015 "	+.012	−1.01	− .07
5	19	− .025 "	− .16	115	−21.6	− .044 "	−.017	−0.91	+ .03
6	12	− .029 "	− .22	132	−27.9	− .064 "	−.037	−0.82	+ .12
7	11	− .041 "	−1.04	124	−28.5	− .073 "	−.046	−1.09	− .15
8	9	− .051 "	− .53	71	−24.3	− .063 "	−.036	−1.13	− .19
9	7	− .023 "	− .66	81	−18.2	− .092 "	−.065	−0.63	+ .31
10	14	− .045 "	− .66	62	−20.9	− .067 "	−.040	−0.61	+ .33
11	10	− .030 "	− .73	70	−21.4	− .097 "	−.070	−0.86	+ .08
12	10	− .039 "	− .62	79	−19.8	− .093 "	−.066	−0.83	+ .11
13	10	− .019 "	− .10	141	−15.4	− .082 "	−.055	−0.91	+ .03
14	12	− .010 "	− .33	136	−19.4	− .055 "	−.028	−0.74	+ .20
15	12	+ .007 "	− .01	123	−22.0	− .048 "	−.021	−1.02	− .08
16	12	− .006 "	.00	142	−25.2	− .038 "	−.011	−0.79	+ .15
17	12	+ .040 "	− .45	160	−23.2	+ .003 "	+.030	−0.69	+ .25
18	9	+ .057 "	− .45	168	−23.8	+ .001 "	+.028	−0.95	− .01
19	12	+ .045 "	− .63	148	−18.8	+ .040 "	+.067	−0.61	+ .33
20	12	+ .056 "	− .68	200	−16.4	+ .025 "	+.052	−0.65	+ .29
21	11	+ .034 "	− .71	194	−18.7	+ .017 "	+.044	−0.74	+ .20
22	16	+ .021 "	− .68	135	−20.5	+ .006 "	+.033	−0.90	+ .04
23	10	+ .047 "	− .46	117	−17.5	+ .019 "	+.046	−0.97	− .03
Sum	276			2731					
Means		+0.002 "	−0.52	By Stars	−21.7	−0.023 "		−0.88	
				Hourly Means		−0.027 "		−0.94	

OBSERVED — CORDOBA GENERAL CATALOGUE: DECLINATION GROUPS.

Decl.	No.	Mean.	$\Delta\alpha$	Reduced.	Obs. $\Delta\delta$	Corr. $\Delta\delta$
° °		°	s	s	"	"
0–10	691	− 5	−0.032	−0.032 sec δ	−0.51	−0.57
−10–20	616	−15	− .007	− .007 "	− .50	− .48
−20–30	629	−25	− .014	− .013 "	− .62	− .48
−30–35	266	−32.5	− .045	− .039 "	− .89	− .58
−35–40	230	−37.4	− .041	− .032 "	−1.32	− .82
−40–46.8	296	−42.9	− .050	− .037 "	−2.71	−1.15
Sum	2728					
Means		−21.7		−0.023 "	−0.88	−0.61
0°–30°	1936			−0.018 "	−0.54	−0.51
Auwers' 303 – C. G. C.				(+0.002 ")	(−0.52)	

TABLE XX. The observations of Volume IV, referred to here as L. O. 310, were reduced with the original B. J. Fundamental places, AUWERS' A. G. C. system, and with the use of the Poulkova Refractions. The places have been brought forward from 1895.0 with the best proper motions available.

There is a small mean difference in the Right Ascensions, and a slight variation with respect to the Declination.

The mean Observed $\Delta\delta$ is due mainly to the systematic difference of the Fundamental Declinations. The Corrected $\Delta\delta$ is obtained by the use of the corrected Refractions, in the present series of observations.

The columns of residuals give the average per star, for each group, taken from the mean differences, $-0^s.010$ and $+0''.29$, of the two sets of observations. They may serve as indication of the respective probable errors. The first series contained, in general, 8 observations of each star; the present one has but 2, for all except Fundamental stars. The probable errors of the present list, as actually derived by comparison, are: $\pm 0^s.016$ sec δ and $\pm 0''.21$.

TABLE XX.

OBSERVED—L. O. 310: DECLINATION GROUPS.

Decl.	No.	Mean.	$\Delta\alpha$	v	Obs. $\Delta\delta$	v	Corr. $\Delta\delta$
° °		°	s	s	"	"	"
0–10	44	− 5.5	−0.022	±0.032 sec δ	+0.34	±0.21	+0.29
−10–20	21	−16.1	− .026	.028 "	+ .44	.25	+ .47
−20–30	22	−26.2	+ .002	.031 "	+ .05	.36	+ .21
−30–35	13	−32.9	+ .006	.021 "	+ .25	.40*	+ .57
−35–40	15	−37.6	+ .009	.023 "	+ .32	.51	+ .82
Sum	115						
Means		−18.7	−0.010	±0.028 "	+0.29	±0.31	+0.41

* One Decl. Δ omitted.

TABLE XXI. This contains a condensed statement of the comparisons of the standard catalogues, including the stars, observed here in the PIAZZI Catalogue, which are found in the respective authorities. The correction to the Circumpolar stars is placed here for convenience of reference.

TABLE XXI.

SYSTEMATIC DIFFERENCES OF STANDARD CATALOGUES.

	No.	Limits.	$\Delta\alpha$	Δ	$\Delta\delta$	Δ
		° °	s	s	"	"
Auwers' Correction to B. J.	129	0 – 31	+0.004	±0.022	–0.01	±0.31
Auwers' Correction to 303	253	0 – 25	–0.001	±0.013	–0.38	±0.39
Auwers' Correction to C. P.	48	+69+90	+ .006 sec δ	± .023 sec δ	–0.01	±0.25
Auwers' 303 – Newcomb	145	0 – 25	–0.029		–0.16	
Auwers' 303 – Boss	18	–20 – 25	–0.006		–0.11	
Auwers' 303 – Auwers' S. Fund.	42	–20 – 25	+0.006		–0.29	
Auwers' B. J. – Newcomb	129	0 – 31	–0.029		–0.52	
Auwers' B. J. – Boss	23	20 – 31	–0.010		–0.63	
Auwers' B. J. – Auwers' S. Fund.	30	20 – 31	+0.006		–0.83	
Ephemeris: Auwers' 303 – Auwers' B. J.	105	0 – 25	0.000		+0.34	

TABLE XXII. This contains, in condensed form, the results given in Tables XVI to XX. Down to —40° the Declination differences are not large, and appear to be in conformity with the systematic differences of the table preceding. Below —40° the observations appear to require a slight further decrease in the Refractions, to reduce them to the Declinations of the standards cited.

TABLE XXII.

SYSTEMATIC DIFFERENCES: OBSERVED — CATALOGUE.

Catalogue.	$\Delta\alpha$		$\Delta\delta$ 0–30°	–20°–30°	–30°–35°	–35°–40°	–40°–43°	–43°–46°.8	Mean.
	s		"	"	"	"	"	"	"
Newcomb Fund.	–0.009	Rate with Decl.	–0.04	–0.13	–0.18	–0.15	–0.70	–0.84	–0.21
Boss S. Stand.	+ .017			– .07	– .03	– .12	– .35	– .51	– .16
Auwers' S. Fund.	+ .041	Rate with Decl.		– .26	– .09	– .19	– .75	– .49	– .31
Auwers' B. J.	+ .006		+ .41						
Auwers' 303	– .003		+ .01						
L. O. 310	– .010		+ .31	+ .21	+ .57	+ .82			+ .41
Cordoba G. C.	–0.025	Variable with R. A.	– .51	– .48	– .58	– .82	–1".15		– .61

(8) **Probable Errors.** TABLE XXIII. The observations of the Fundamental stars have not been included in the comparisons, upon which the results of this table are based. A large number of pairs of observations have been used for this discussion, and less than one per cent of the observed differences have been rejected, in deriving the mean results.

The probable errors of one observation, and of the mean of two, have been obtained by the usual expression, from the results for the probable error of the difference of two observations, from the direct comparison. The probable error

of the Right Ascensions increases slowly, with increasing Declination, and in terms of arc on the celestial sphere the increase is very small. The probable error of the Declinations increases rapidly below $-30°$, and at the extreme limit, $-46°.8$, shows probably the effect of the uncertainty in the Refraction, as well as the uncertainty of the actual bisection. An approximate formula, for the variation of the probable error of observation in Declination, has been computed from the tabular results. In the last column, the probable error of graduation has been assumed to be $\pm 0''.15$, as derived in the measure of Division error, Volume IV, and confirmed by the subsequent reduction of observations. Down to $-40°$, the probable error of the mean of two observations is very closely a quarter of a second of arc, in each coördinate.

TABLE XXIII.

PROBABLE ERRORS OF OBSERVATION. 10° GROUPS.

PROBABLE ERROR Δ TWO OBSERVATIONS.					ONE OBSERVATION.		MEAN OF TWO OBSERVATIONS.		
Decl.	No.	R. A.	Reduced.	Decl.	R. A.	Decl.	R. A.	Decl.	Including Division Error.
°		s	s	″	s	″	s	″	″
− 4.9	727	±0.032	±0.032 sec δ	±0.31	±0.022 sec δ	±0.22	±0.016 sec δ	±0.15	±0.21
−15.0	627	.033	.032 "	.34	.022 "	.24	.016 "	.17	.23
−24.7	642	.034	.031 "	.37	.022 "	.26	.015 "	.18	.24
−34.6	506	.041	.034 "	.70	.024 "	.49	.017 "	.35	.38
−42.8	299	.051	.038 "	1.21	.027 "	.85	.019 "	.60	.62
Sum	2801								
Means	−22°.0	±0.036	±0.033 "	±0.50	±0.023 "	±0.35	±0.016 "	±0.25	±0.30
					To −40° Declination:			±0.21	±0.26

Declination Formula: Probable error, mean of two observations = $\pm 0''.15 + 0''.09$ (tan Z. D. − 1).

At Declination −46°.8, the probable error of the mean of two would be, $\pm 1''.0$.

(9) **The Magnitudes.** It had not been my practice, in Meridian Circle work, to make estimates of magnitude for the brighter classes of stars, of which the magnitudes in general have been well determined. By noting the Ephemeris magnitude of the Fundamental stars, it was soon found to be possible to adjust my scale for the brighter stars. In the neighborhood of fifth and sixth magnitudes, the estimates of PIAZZI are nearly those of the modern practice, but his estimates are entirely unreliable for the faint stars.

My estimates appear in general to be somewhat brighter than those of the Cordoba General Catalogue, for stars fainter than magnitude 7. This, however, had been clear to me, in the observation of the Durchmusterung, at Cordoba; and the experience with the Meridian Circle here, under conditions differing essentially from those of a dark field and strictly continuous observing, only confirm the scale based upon practice at Cordoba, and previously at Albany, with ARGELANDER'S Durchmusterung as standard.

The stars which were estimated as 5, or fainter, during the progress of observing, have been compared with the Cordoba General Catalogue. The magnitudes of the latter, for stars brighter than 7, are generally taken from the Uranometry, for which the estimates were made with the naked eye.

In making the comparison, the estimates made here have first been taken as reference magnitudes, forming the first part of the table below. There is an evident tendency toward excess in number, at the even magnitudes, 6 and 7, as would naturally be anticipated. Of the whole number of stars, 22 per cent are estimated brighter than 6, 59 per cent brighter than 7, 90 per cent brighter than 8. Over 2600 stars are counted, those estimated brighter than 5 having been excluded. This gives a fairly complete test of the magnitude scale, down to 8, or a little fainter.

In order to eliminate, as far as possible, the effect of accumulation of special types in the estimates, the same comparisons have been treated, in the second part of the table, with the Cordoba magnitudes as reference types. In combining the Catalogue magnitudes, 5.1, 5.2, and 5.3 have been counted under 5¼; 5.4, 5.5, and 5.6 under 5½; 5.7, 5.8, and 5.9 under 5¾. This gives a fairly good distribution for the Cordoba scale, except at magnitude 6. The comparison based upon Catalogue stars, brighter than 5, is evidently to be excluded, since no estimates brighter than 5 here, have been counted; and in the case of Catalogue 5¼, the stars not counted would undoubtedly balance the excess of plus signs.

There is a marked difference in the two comparisons, between 8 and 9. The Cordoba Catalogue includes more than twice as many stars in this class, as given by the estimates made here, 22 per cent against 10 per cent. Thus there are 23 per cent brighter than 6, 53 per cent brighter than 7, 77 per cent brighter than 8.

This comparison, in duplicate, is on the plan of those previously made by me, for the discussion of the Durchmusterung estimates.

Finally, the direct mean of the two comparisons, for individual types, is given in the last column; with a weighted mean, in addition.

The general results of the comparison may be summarized, as indicating an agreement of the estimates made here, with those of the Cordoba General Catalogue (Uranometry), at magnitude 5. In general, however, my estimates are brighter by ¼ magnitude; the difference increasing for faint stars, up to ½ magnitude, at 9. This is in accord with the results of comparisons made during the observation of the Cordoba Durchmusterung.

The comparison with the Catalogue magnitudes was not made until after the close of observations here. But little attention was paid to the estimates of PIAZZI, during observing; and my scale was based, as far as possible, upon the Ephemeris magnitudes of the Fundamental stars.

TABLE XXIV.

COMPARISON OF MAGNITUDES: OBSERVED AND CORDOBA G. C.

OBSERVED STANDARD.				CORDOBA STANDARD.				MEAN Δ	WEIGHTS.	
Obs.	No.	C.G.C.	Obs. – C.	C.G.C.	No.	Obs.	Obs. – C.	Mag.	Obs. – C.	Obs. – C.
				4.49	102	5.12	(+0.63)			
5	180	5.02	– 0.02	5	30	5.40	(+ .40)			
5¼	85	5.37	– .12	5¼	93	5.31	+ .06	5¼	– 0.03	– 0.03
5½	163	5.67	– .17	5½	134	5.57	+ .07	5½	– .05	– .06
5¾	140	5.89	– .14	5¾	243	5.71	– .04	5¾	– .09	– .08
6	393	6.15	– .15	6	88	5.85	– .15	6	– .15	– .15
6¼	204	6.54	– .29	6¼	200	6.07	– .18	6¼	– .23	– .23
6½	187	6.75	– .25	6½	248	6.22	– .28	6½	– .27	– .27
6¾	189	6.97	– .22	6¾	240	6.52	– .23	6¾	– .23	– .23
7	289	7.40	– .40	7	149	6.82	– .18	7	– .29	– .33
7¼	190	7.71	– .46	7¼	140	6.95	– .30	7¼	– .38	– .39
7½	179	7.81	– .31	7½	185	7.11	– .39	7½	– .35	– .35
7¾	161	8.02	– .27	7¾	148	7.20	– .55	7¾	– .41	– .41
8	119	8.18	– .18	8	252	7.48	– .48	8	– .33	– .38
8¼	86	8.36	– .11	8¼	134	7.74	– .49	8¼	– .30	– .34
8½	39	8.59	– .09	8½	147	7.91	– .59	8½	– .34	– .49
8¾	8	8.85	– .10	8¾	38	8.16	– .59	8¾	– .35	– .50
9	2	9.0	.00	9	16	8.42	– .58	9	– .29	– .53
9¼	1	9.5	– .25	9¼	3	8.58	– .67			
				9½	1	9.25	– .25			
Sum 2615										
Mean 5 to 9			– 0.20				– 0.29		– 0.25	– 0.28
Mean, by weights			– 0.22				– 0.28		– 0.25	– 0.26
Groups: 5 to 6			– 0.11	Groups: 5 to 6			+ 0.03	5 to 6	– 0.05	– 0.05
6 " 7			– .23	6 " 7			– .21	6 " 7	– .22	– .22
7 " 8			– .36	7 " 8			– .35	7 " 8	– .36	– .37
8 " 9			– .12	8 " 9			– .54	8 " 9	– .33	– .43
Mean			– 0.21				– 0.27		– 0.24	– 0.27

(10) **The Observations of the Piazzi Stars.** The separate observations of magnitude, and of Right Ascension and Declination for the mean Equinox of the year of observation, are given for each star. The order of the original list has been retained here, while later, in the Catalogue, the stars will be placed strictly in order of Right Ascension for 1900. These observations can be reduced to the epoch 1900.0 by means of the Precessions, given in the Catalogue. The Declinations are those derived by use of the Poulkova Refractions, unchanged, and below the mean of the observations of each star, the correction for the diminished Refraction has been entered.

The Latitude derived with the Declinations of the Fundamental Lists, Tables III and IV, has been entered for each Fundamental star, with the Reduced Latitude, corrected for the computed Variation. Below this last, the correction for the diminished Refraction has been entered. These corrections to the Refraction will be found in Table II.

About 6800 observations are here included, while the observations of Nadirs and Circumpolar stars bring the total up to 7600 for this series, an average of 55 per night, for full nights, or 550 per month.

OBSERVATIONS OF PIAZZI STARS.

No. 272.

1898	Mag.	h	m	s	°	′	″
Oct. 12	5	0	0	6.837	−6	16	41.29
13	4			6.839			41.21
				6.838			41.25
							−.05

No. 273.

1898	Mag.	h	m	s	°	′	″
Oct. 19	7	0	0	17.310	−10	11	0.40
20	6½			17.312			0.29
				17.311			0.34
							−.02

No. 277.

1898	Mag.	h	m	s	°	′	″
Oct. 18	6	0	1	36.842	−23	40	27.24
Nov. 3	6½			36.899			27.38
				36.870			27.31
							+.12

No. 278.

1898	Mag.	h	m	s	°	′	″
Oct. 27		0	2	30.550	−3	6	59.31
Nov. 1				30.501			59.82
				30.526			59.57
							−.07
Obs. Lat. 303					37	20	25.52
Red. Lat.							25.79
							−.17

No. 279.

1898	Mag.	h	m	s	°	′	″
Oct. 19	5	0	2	52.432	−34	5	50.18
20	5½			52.437			50.55
				52.434			50.37
							+.36

No. 280.

1898	Mag.	h	m	s	°	′	″
Oct. 12	6	0	2	58.674	−3	0	55.59
13	6½			58.699			56.39
				58.687			55.99
							−.07

No. 282.

1898	Mag.	h	m	s	°	′	″
Oct. 25	7	0	3	29.406	−2	47	25.38
26	6½			29.438			25.67
				29.422			25.52
							−.07

No. 285.

1898	Mag.	h	m	s	°	′	″
Oct. 17	5	0	4	9.115	−28	33	20.57
18	5			9.118			20.15
				9.117			20.36
							+.21

No. 286.

1898	Mag.	h	m	s	°	′	″
Oct. 27	6½	0	4	41.665	−3	7	42.80
Nov. 1	6½			41.686			42.78
				41.676			42.79
							−.07

No. 1.

1898	Mag.	h	m	s	°	′	″
Nov. 3	6	0	5	5.448	−5	48	55.44
9	6			5.513			54.97
				5.480			55.20
							−.05

No. 3.

1898	Mag.	h	m	s	°	′	″
Oct. 19	7½	0	5	10.335	−12	21	11.42
20	7¾			10.401			11.77
				10.368			11.60
							.00

No. 4.

1898	Mag.	h	m	s	°	′	″
Oct. 12	7	0	5	56.241	−3	53	18.85
13	7			56.312			19.31
				56.277			19.08
							−.06

No. 5.

1898	Mag.	h	m	s	°	′	″
Oct. 25	5	0	6	4.362	−16	1	40.88
26	5			4.356			41.04
				4.359			40.96
							+.03

No. 6.

1898	Mag.	h	m	s	°	′	″
Oct. 17	5½	0	6	23.668	−28	22	4.70
18	5½			23.719			4.63
				23.693			4.67
							+.20

No. 7.

1898	Mag.	h	m	s	°	′	″
Oct. 27	5½	0	6	32.891	−35	42	15.40
Nov. 1	5			32.912			15.92
				32.901			15.66
							+.42

No. 10.

1898	Mag.	h	m	s	°	′	″
Oct. 19	7	0	7	59.305	−5	48	32.26
20	7¼			59.253			32.75
				59.279			32.50
							−.05

No. 11.

1898	Mag.	h	m	s	°	′	″
Nov. 3	7	0	8	5.285	−38	23	28.55
9	7			5.359			24.48
				5.322			26.51
							+.55

No. 15.

1898	Mag.	h	m	s	°	′	″
Oct. 12		0	9	27.550	−19	29	53.18
13				27.543			53.64
				27.547			53.41
							+.07
Obs. Lat. 303					37	20	26.59
Red. Lat.							26.86
							−.31

No. 15.

1899	Mag.	h	m	s	°	′	″
Sep. 19		0	9	30.612	−19	29	33.36
26				30.627			32.79
				30.619			33.08
							+.07
Obs. Lat. 303					37	20	25.75
Red. Lat.							25.87
							−.31

No. 20.

1898	Mag.	h	m	s	°	′	″
Oct. 17	6	0	9	49.393	−35	28	16.68
18	6			49.312			17.71
				49.352			17.20
							+.41

No. 21.

1898	Mag.	h	m	s	°	′	″
Oct. 25	7	0	10	3.827	−6	42	14.59
26	7			3.844			14.61
				3.836			14.60
							−.05

No. 23.

1898	Mag.	h	m	s	°	′	″
Oct. 19	6	0	10	59.350	−32	0	46.65
20	6			59.315			46.01
				59.332			46.33
							+.29

No. 29.

1898	Mag.	h	m	s	°	′	″
Oct. 27	8	0	11	55.013	−12	36	25.87
Nov. 1	7¾			54.970			25.97
				54.991			25.92
							.00

No. 31.

1898	Mag.	h	m	s	°	′	″
Oct. 12	7	0	12	22.080	−19	37	4.23
13	7			22.180			3.93
				22.130			4.08
							+.07

No. 34.

1898	Mag.	h	m	s	°	′	″
Oct. 25	6½	0	12	35.154	−2	25	46.84
26	6½			35.185			46.70
				35.170			46.77
							−.07

No. 36.

1898	Mag.	h	m	s	°	′	″
Oct. 17	7	0	13	5.085	−2	34	53.71
18	7			5.118			53.21
				5.101			53.46
							−.07

No. 39.

1898	Mag.	h	m	s	°	′	″
Oct. 19	8	0	13	35.984	−11	30	54.66
20	7½			35.934			55.28
				35.959			54.97
							−.01

No. 40.

1898	Mag.	h m s	° ′ ″
Oct. 27	6	0 13 37.616	−43 48 12.36
Nov. 1	6	37.617	10.16
		37.617	11.26
			+1.83

No. 42.

1898			
Nov. 3		0 14 13.776	−9 23 21.79
9		.765	21.41
10		.811	21.45
14		.818	21.39
		13.792	21.51
			−.03
Obs. Lat. B. J.			37 20 25.58
Red. Lat.			25.84
			−.21

No. 44.

1898			
Oct. 25	7	0 14 59.119	−13 37 42.18
26	6¾	59.196	41.77
		59.158	41.98
			+.01

No. 48.

1898			
Oct. 12	7½	0 16 9.309	−36.21 52.11
13	7	9.327	50.77
		9.318	51.44
			+.44

No. 49.

1898			
Oct. 19	8	0 16 25.535	−16 46 23.77
20	8	25.523	23.83
		25.529	23.80
			+.04

No. 50.

1898			
Oct. 17	6	0 16 23.756	−29 32 44.51
18	5	23.734	45.06
		23.745	44.79
			+.23

No. 51.

1898			
Nov. 3	7½	0 16 42.846	−23 34 16.63
9	7½	42.947	15.65
		42.897	16.14
			+.12

No. 55.

1898			
Oct. 25		0 17 38.209	−12 46 37.36
26		.206	37.57
Nov. 10		.238	37.33
14		.191	37.26
		38.211	37.38
			.00
Obs. Lat. 303			37 20 26.33
Red. Lat.			26.60
			−.24

No. 56.

1898	Mag.	h m s	° ′ ″
Oct. 27	6½	0 17 53.903	−16 30 33.56
Nov. 1	6½	53.873	32.49
		53.888	33.02
			+.03

No. 57.

1898			
Oct. 19	6½	0 18 6.323	−31 36 6.56
20	6½	6.351	6.33
		6.337	6.44
			+.28

No. 60.

1898			
Oct. 12	6	0 19 16.858	−2 46 59.78
13	6	16.924	60.18
		16.891	59.98
			−.07

No. 62.

1898			
Nov. 3	7½	0 19 39.254	−12 16 33.34
9	7¼	39.277	32.21
		39.266	32.78
			−.01

No. 63.

1898			
Oct. 17	8	0 19 44.119	−16 35 36.55
18	7½	44.111	36.53
		44.115	36.54
			+.03

No. 67.

1898			
Oct. 25	7	0 20 41.056	−8 54 59.38
26	6½	41.155	59.27
		41.106	59.32
			−.03

No. 68.

1898			
Nov. 10	5	0 21 11.219	−44 14 50.66
15	6	11.304	48.18
16	5½	11.286	47.83
		11.270	48.89
			+2.04

No. 69.

1898			
Oct. 27	2	0 21 14.655	−42 51 39.27
Nov. 1	2	14.613	35.25
		14.634	37.26
			+1.45

No. 70.

1898			
Oct. 19	6	0 21 23.463	−0 36 52.40
20	6½	23.469	52.48
		23.466	52.44
			−.08

No. 72.

1898			
Oct. 12	7	0 21 53.159	−5 34 4.30
13	7	53.197	4.26
		53.178	4.28
			−.05

No. 78.

1898	Mag.	h m s	° ′ ″
Oct. 17	7	0 22 49.982	−12 13 22.91
18	6½	49.963	22.73
	Red	49.972	22.82
			−.01

No. 79.

1898			
Oct. 25	5	0 22 52.230	−33 34 13.75
26	5	52.250	14.10
		52.240	13.92
			+.34

No. 81.

1898			
Nov. 3	6	0 23 24.769	−40 28 44.39
9	6	24.840	42.76
		24.804	43.58
			+.76

No. 82.

1898			
Oct. 27	6½	0 24 0.066	−12 9 47.31
Nov. 1	6½	0.056	46.43
		0.061	46.87
			−.01

No. 83.

1898			
Oct. 19	6½	0 24 16.621	−4 2 0.25
20	6¾	16.566	0.48
		16.593	0.37
			−.06

No. 84.

1898			
Nov. 10	6	0 24 23.330	−41 13 47.69
14		23.315	46.71
		23.322	47.20
			+.94

No. 87.

1898			
Nov. 3	7	0 24 41.140	−1 40 45.48
9	7	41.175	45.46
		41.158	45.47
			−.08

No. 88.

1898			
Oct. 12	6	0 24 41.686	−15 25 38.28
13	6	41.781	37.75
		41.733	38.01
			+.02

No. 89.

1898			
Oct. 17		0 24 49.901	−4 31 14.86
18		49.951	14.60
		49.926	14.73
			−.06
Obs. Lat. B. J.			37 20 24.78
Red. Lat.			25.05
			−18

No. 91.

1898	Mag.	h	m	s	°	′	″
Nov. 10		0	25	16.743	− 24	21	8.65
14				16.640			7.31
				16.691			7.98
							+.13
Obs. Lat. 303					37	20	27.12
Red. Lat.							27.38
							−.37

No. 94.

1898							
Oct. 27		0	25	28.880	− 41	30	15.38
Nov. 1	6			28.905			17.36
				28.892			16.37
							+1.02

No. 96.

1898							
Oct. 25	6	0	25	49.601	− 10	38	52.43
26	6			49.649			52.00
Prec. star				49.625			52.21
							−.02

No. 100.

1898							
Oct. 19	6	0	26	56.777	− 18	47	4.53
20	6½			56.694			4.40
				56.736			4.47
							+.06

No. 106.

1898							
Oct. 12	7½	0	27	59.228	− 4	24	39.41
13	7½			59.301			39.84
				59.264			39.62
							−.06

No. 107.

1898							
Nov. 3	7	0	28	15.978	− 1	10	15.24
9	6½			15.960			14.91
				15.969			15.08
							−.08

No. 109.

1898							
Oct. 25	5½	0	28	38.322	− 30	7	13.01
26	5½			38.351			13.74
				38.337			13.38
							+.24

No. 111.

1898							
Oct. 27	6½	0	28	43.828	− 35	33	1.67
Nov. 1				43.883			2.10
10″ dup. N. prec.				43.856			1.89
							+.41

No. 113.

1898							
Nov. 10	7	0	29	17.295	− 5	6	32.97
14	7			17.268			32.42
S. prec. 0ˢ.8				17.281			32.70
							−.06

No. 117.

1898	Mag.	h	m	s	°	′	″
Oct. 19	5	0	29	59.863	− 4	9	15.06
20	6			59.815			15.47
				59.839			15.27
							−.06

No. 120.

1898							
Oct. 25	6	0	30	18.520	− 1	3	57.90
26	6			18.613			57.61
				18.567			57.76
							−.08

No. 129.

1898							
Oct. 12	8	0	31	44.559	− 3	57	42.14
13	7½			44.595			42.12
				44.577			42.13
							−.06

No. 130.

1898							
Oct. 17	6	0	32	6.421	− 25	19	43.93
18	6			6.393			43.81
				6.407			43.87
							+.15

No. 132.

1898							
Oct. 27	8½	0	32	45.364	− 6	33	33.53
Nov. 1	8			45.426			33.20
				45.395			33.37
							−.05

No. 133.

1898							
Oct. 19		0	32	51.577	− 1	3	52.10
20				.554			52.22
Nov. 15				.588			52.19
16				.575			51.97
				51.573			52.12
							−.08
Obs. Lat. 303					37	20	25.87
Red. Lat.							26.13
							−.16

No. 142.

1898							
Oct. 12	7	0	34	34.922	− 11	42	28.71
13	7			34.904			28.52
				34.913			28.61
							−.01

No. 144.

1898							
Oct. 17	6½	0	35	21.560	− 17	4	33.28
18	6			21.592			32.66
				21.576			32.97
							+.04

No. 146.

1898							
Oct. 19	6	0	35	30.744	− 4	54	41.53
20	6			30.737			41.81
Fol. star				30.740			41.67
							−.06

No. 151.

1898	Mag.	h	m	s	°	′	″
Oct. 25	7	0	36	24.790	− 20	51	34.90
26	6¾			24.786			34.78
				24.788			34.84
							+.08

No. 152.

1898							
Oct. 27	6	0	37	5.491	− 12	21	49.38
Nov. 1	6½			5.430			49.58
				5.460			49.48
							.00

No. 153.

1898							
Nov. 10	6½	0	37	5.847	− 43	41	8.94
							+1.78

1899							
Sep. 19				8.712		40	46.35
26	6¾			8.688			47.63
				8.700			46.99
							+1.78

No. 155.

1898							
Oct. 12	7½	0	37	35.960	− 20	45	10.47
13	6½			35.983			10.74
				35.971			10.60
							+.08

No. 157.

1898							
Oct. 17	7½	0	37	49.648	− 4	24	56.18
18	7			49.581			56.03
				49.614			56.10
							−.06

No. 158.

1898							
Nov. 3	6½	0	37	48.404	− 39	1	20.44
9	6			48.495			21.16
				48.450			20.80
							+.58

No. 159.

1898							
Oct. 19		0	38	28.158	− 18	32	47.74
20				28.190			47.83
				28.174			47.79
							+.05
Obs. Lat. B. J.					37	20	25.77
Red. Lat.							26.04
							−.29

No. 161.

1898							
Nov. 15	6	0	38	41.884	− 12	33	54.22
16	6½			41.947			53.76
				41.916			53.99
							.00

No. 163.

1898							
Oct. 25	5	0	39	2.670	− 11	9	54.37
26	5			2.724			53.95
				2.697			54.16
							−.01

No. 164.

1898	Mag.	h	m	s	°	′	″
Oct. 27	6	0	39	16.229	−38	59	2.87
Nov. 1	5½			16.272			3.87
				16.250			3.37
							+.58

No. 166.

1898							
Nov. 10	5	0	39	41.525	−22	34	1.53
14	5½			41.539			1.49
				41.532			1.51
							+.10

No. 167.

1898							
Oct. 19	7	0	39	55.684	−0	18	12.71
20	7			55.646			12.79
				55.665			12.75
							−.09

No. 169.

1898							
Nov. 3	6½	0	39	51.565	−12	42	7.71
9	6¾			51.586			7.98
				51.576			7.84
							.00

No. 171.

1898							
Oct. 12	6	0	40	12.511	−5	11	18.26
13	6			12.568			18.61
				12.540			18.43
							−.06

No. 172.

1898							
Oct. 25	6	0	40	21.209	−13	25	59.58
26	6			21.327			59.14
				21.268			59.36
							.00

No. 173.

1898							
Nov. 15	6½	0	40	7.834	−43	13	58.51
16	6			7.790			60.39
				7.812			59.45
							+1.58

No. 174.

1898							
Oct. 17	6½	0	40	35.740	−16	58	55.45
18	6½			35.734			55.46
				35.737			55.46
							+.04

No. 188.

1898							
Oct. 12	8	0	42	41.945	−6	32	56.24
13	7¾			42.010			56.51
				41.978			56.38
							−.05

No. 198.

1898							
Oct. 19	6	0	44	18.190	−14	6	51.98
20	6			18.153			52.61
				18.171			52.30
							+.01

No. 200.

1898	Mag.	h	m	s	°	′	″
Oct. 25	6½	0	44	34.824	−8	24	20.07
26	7			34.905			19.71
				34.864			19.89
							−.03

No. 201.

1898							
Oct. 17		0	45	1.031	−11	11	37.82
18				.025			37.63
Nov. 3				.052			37.78
9				.047			37.41
15				.048			37.84
16				.102			37.61
				1.051			37.68
							−.01
Obs. Lat. 303						37	20 26.08
Red. Lat.							26.34
							−.23

No. 205.

1898							
Oct. 27	6½	0	45	16.969	−43	57	4.86
Nov. 1	6¾			16.995			6.28
				16.982			5.57
							+1.90

No. 210.

1898							
Oct. 12	7	0	46	11.411	−9	57	39.71
13	6½			11.449			39.98
				11.430			39.84
							−.02

No. 212.

1898							
Nov. 3	6½	0	47	6.511	−44	15	50.97
9	6¾			6.551			51.29
				6.531			51.13
							+2.04

No. 213.

1898							
Oct. 17	5	0	47	47.640	−1	41	53.29
18	5			47.702			53.58
				47.671			53.43
							−.08

No. 219.

1898							
Oct. 12	7½	0	48	36.122	−14	28	27.20
13	7¼			36.048			27.99
				36.085			27.60
							+.01

No. 222.

1898							
Oct. 19	6	0	49	8.807	−9	17	34.30
20	6½			8.755			34.63
				8.781			34.47
							−.03

No. 230.

1898							
Oct. 17	6	0	50	33.107	−7	53	55.61
18	6			33.061			55.48
				33.084			55.54
							−.04

No. 235.

1898	Mag	h	m	s	°	′	″
Oct. 12		0	50	54.580	−11	49	8.16
13				.641			8.62
Nov. 10				.629			8.00
14				.629			7.17
				54.620			7.99
							−.01
Obs. Lat. 303						37	20 26.11
Red. Lat.							26.38
							−.23

No. 249.

1898							
Oct. 17	5	0	53	37.484	−11	55	50.28
18	6½			37.475			50.68
				37.480			50.48
							−.01

No. 250.

1898							
Nov. 3	4	0	53	41.487	−29	54	33.63
9	5			41.457			31.63
				41.472			32.63
							+.24

No. 251.

1898							
Nov 10	7	0	54	9.628	+0	13	52.67
14	7			9.619			52.86
S. fol.				9.623			52.77
							−.09

No. 265.

1898							
Oct. 17	6	0	57	34.192	−32	6	5.23
18	6			34.161			5.34
				34.177			5.29
							+.29

No. 266.

1898							
Oct. 12	6	0	57	52.895	−5	22	55.23
13	5½			52.979			56.11
				52.937			55.67
							−.05

No. 284.

1898							
Oct. 17	6	1	0	30.220	−10	31	29.94
18	6½			30.195			30.14
				30.208			30.04
							−.02

No. 286.

1898							
Oct. 12	6	1	0	58.098	−10	23	9.03
13	6			58.092			9.10
				58.095			9.07
							−.02

No. 288.

1898							
Oct. 19	7½	1	1	19.953	−10	18	46.44
20	7¼			19.919			46.89
				19.936			46.67
							−.02

No. 296.

1898	Mag.	h	m	s	°	′	″
Oct. 25	6	1	2	38.403	−10	19	52.72
26	5½			38.499			52.12
				38.451			52.42
							−.02

No. 300.

1898							
Oct. 12		1	3	27.474	−10	43	22.52
13				27.539			22.58
				27.507			22.55
							−.02
Obs. Lat. B. J.					37	20	25.74
Red. Lat.							26.01
							−.22

No. 303.

1898							
Oct. 19	6	1	3	8.266	−42	1	59.94
20	6			8.234			58.77
				8.250			59.36
							+1.18

No. 2.

1898							
Oct. 17	7	1	5	4.941	−9	26	54.13
18	6½			4.955			54.83
				4.948			54.48
							−.03

No. 10.

1898							
Oct. 12	6	1	6	32.189	−2	47	34.02
13	6½			32.226			34.30
				32.208			34.16
							−.07

No. 14.

1898							
Oct. 19	7	1	7	39.617	−7	19	28.05
20	6½			39.638			28.65
				39.628			28.35
							−.04

No. 18.

1898							
Oct. 17	7	1	8	2.441	−35	44	48.92
18	7			2.507			49.39
				2.474			49.16
							+.42

No. 20.

1898							
Oct. 25	6	1	8	3.506	−38	23	50.20
26	6			3.481			51.11
				3.493			50.66
							+.55

No. 22.

1898							
Oct. 27	7¾	1	9	14.055	−8	27	32.78
Nov. 1	7			14.069			32.50
N. prec.				14.062			32.64
							−.03

No. 24.

1898	Mag.	h	m	s	°	′	″
Oct. 12	5½	1	9	15.772	−8	28	15.78
13	6			15.727			15.71
Fol. star				15.750			15.74
							−.03

No. 25.

1898							
Oct. 19	6	1	9	36.593	−1	31	10.66
20	6			36.594			10.43
				36.593			10.54
							−.08

No. 32.

1898							
Oct. 17		1	11	25.544	−3	2	14.02
18				.529			14.03
Nov. 3				.492			13.37
9				.498			13.96
				25.516			13.84
							−.07
Obs. Lat. 303					37	20	25.73
Red. Lat.							26.00
							−.17

No. 33.

1898							
Oct. 12	6½	1	11	45.704	−2	48	48.79
13	6½			45.682			49.12
				45.693			48.96
							−.07

No. 38.

1898							
Oct. 19	6½	1	12	34.808	−8	11	52.64
20	6½			34.784			53.00
				34.796			52.82
							−.04

No. 47.

1898							
Oct. 12	6	1	14	35.329	−1	2	40.72
13	6			35.356			40.82
				35.342			40.77
							−.08

No. 58.

1898							
Oct. 12	6½	1	17	21.728	−0	58	59.00
13	6½			21.727			59.38
				21.728			59.19
							−.09

No. 65.

1898							
Oct. 27	7	1	17	54.523	−44	8	15.15
Nov. 1				54.487			18.43
				54.505			16.79
							+1.99

No. 66.

1898							
Oct. 17	6½	1	18	54.707	−8	32	17.24
18	6			54.690			16.79
				54.699			17.01
							−.03

No. 67.

1898	Mag.	h	m	s	°	′	″
Oct. 19		1	18	55.535	−8	42	35.07
20				.380			35.27
Nov. 10				.458			35.18
14				.424			35.39
				55.449			35.23
							−.03
Obs. Lat. B. J.					37	20	25.83
Red. Lat.							26.10
							−.21

No. 68.

1898							
Oct. 25	6	1	18	43.203	−24	53	9.42
26	6½			43.307			9.66
Dup. prec.				43.255			9.54
							+.14

No. 75.

1898							
Oct. 12	5	1	20	36.288	−15	7	45.28
13	5			36.317			46.66
				36.302			45.97
							+.02

No. 76.

1898							
Oct. 19	6	1	20	9.926	−42	1	26.09
20	6½			9.864			25.10
				9.895			25.60
							+1.18

No. 78.

1898							
Nov. 3	6½	1	20	16.173	−45	3	38.01
9	6			16.134			36.43
				16.153			37.22
							+2.48

No. 82.

1898							
Oct. 25	5½	1	21	49.545	−13	35	13.04
26	5½			49.588			13.49
				49.567			13.27
							+.01

No. 94.

1898							
Nov. 10	3	1	23	56.213	−43	50	33.26
14				56.130			28.40
				56.171			30.83
							+1.85

No. 96.

1898							
Nov. 3		1	24	42.558	−22	9	25.69
9				42.523			25.69
				42.540			25.69
							+.10
Obs. Lat. 303					37	20	26.81
Red. Lat.							27.08
							−.34

No. 99.

1898							
Oct. 19	6	1	25	34.451	−26	44	4.41
20	6½			34.461			4.56
				34.456			4.49
							+.17

No. 103.

1898	Mag.	h m s	° ′ ″
Oct. 12	7½	1 27 17.072	−24 10 16.41
13	7½	17.085	16.99
		17.079	16.70
			+.13

No. 108.

1898			
Oct. 17	6½	1 27 58.369	−9 32 20.53
18	6½	58.385	20.97
		58.377	20.75
			−.03

No. 109.

1898			
Oct. 25	6	1 28 22.308	−37 23 19.86
26	6	22.308	20.68
		22.308	20.27
			+.49

No. 117.

1898			
Oct. 19	5	1 29 38.743	+16 11 56.32
20	5½	38.802	56.59
		38.772	56.46
			+.03

No. 122.

1898			
Oct. 12	7	1 30 24.162	−13 54 15.20
13	7	24.264	15.04
		24.213	15.12
			+.01

No. 125.

1898			
Oct. 27		1 31 0.488	−15 55 19.23
Nov. 1		.461	18.74
15		.473	19.00
16		.458	18.49
		0.470	18.86
			+.03
Obs. Lat. 303			37 20 25.22
Red. Lat			25.48
			−.27

No. 127.

1898			
Oct. 17	6	1 31 25.639	−30 25 47.37
18	6	25.673	47.97
Mean. 2″ dup.		25.656	47.67
			+.25

No. 131.

1898			
Oct. 19	6	1 32 31.812	−9 55 34.36
20	6¼	31.759	34.85
		31.786	34.60
			−.02

No. 134.

1898			
Oct. 25	8	1 32 22.013	−25 32 10.10
26	8	22.016	10.69
		22.014	10.40
			+.15

No. 140.

1898	Mag.	h m s	° ′ ″
Oct. 12	7	1 34 2.743	−25 32 28.68
13	7	2.739	27.62
		2.741	28.15
			+.15

No. 141.

1898			
Oct. 17	6½	1 33 55.582	−37 2 37.90
18	6	55.537	38.79
		55.560	38.34
			+.48

No. 147.

1898			
Oct. 25	7	1 35 11.483	−37 59 26.50
26	7	11.568	25.76
Fol. star 1ᵐ.7		11.526	26.13
			+.52

No. 153.

1898			
Oct. 19	8¼	1 36 19.374	−22 14 7.48
20	8	19.253	7.82
		19.313	7.65
			+.10

No. 156.

1898			
Oct. 12	6½	1 36 58.823	−38 39 3.87
13	6	58.756	0.74
		58.790	2.30
			+.56

No. 157.

1898			
Oct. 17	6	1 37 32.396	−32 50 29.78
18	6	32.374	29.67
		32.385	29.72
			+.31

No. 158.

1898			
Oct. 25	5	1 37 33.155	−37 20 49.72
26	5	33.261	49.58
		33.208	49.65
			+.49

No. 160.

1898			
Oct. 27	6	1 38 46.552	−5 16 41.63
Nov. 1	6½	46.498	41.64
		46.525	41.63
			−.06

No. 163.

1898			
Oct. 19		1 39 19.638	−16 28 27.89
20		.682	28.23
Nov. 3		.640	27.88
9		.691	27.83
		19.663	27.96
			+.03
Obs. Lat. B. J.			37 20 25.38
Red. Lat.			25.65
			−.27

No. 167.

1898	Mag.	h m s	° ′ ″
Oct. 25		1 40 52.005	−6 14 37.19
26		.011	37.13
Nov. 15		.007	37.39
16		.040	37.73
		52.016	37.36
			−.05
Obs. Lat. 303			37 20 26.06
Red. Lat.			26.32
			−.19

No. 168.

1898			
Oct. 17		1 40 52.161	−25 33 45.43
18		.157	45.72
Nov. 10		.166	46.64
14		.147	45.28
		52.158	45.77
			+.15
Obs. Lat. B. J.			37 20 26.10
Red. Lat.			26.37
			−.39

No. 178.

1898			
Oct. 12	7	1 43 20.557	−37 40 10.88
13	6	20.652	9.07
		20.604	9.98
			+.51

No. 180.

1898			
Oct. 17	7½	1 43 53.090	−26 45 43.04
18	7	53.041	43.23
		53.066	43.13
			+.17

No. 182.

1898			
Oct. 19	7	1 44 22.706	−11 12 29.86
20		22.724	30.16
S. prec.		22.715	30.01
			−.01

No. 183.

1898			
Oct. 25	5	1 44 34.447	−11 11 27.54
26	4	34.524	27.24
N. fol.		34.486	27.39
			−.01

No. 188.

1898			
Oct. 12	6½	1 45 24.805	−38 55 6.01
13	6½	24.752	2.94
		24.779	4.48
			+.58

No. 192.

1898	Mag.	h	m	s	°	′	″
Oct. 25		1	46	25.466	− 10	50	20.21
26				.535			20.02
Nov. 3				.469			19.93
9				.526			20.03
				25.499			20.05
							− .02
Obs. Lat. B. J.					37	20	25.57
Red. Lat.							25.84
							− .22

No. 198.

Oct. 17	6½	1	47	5.468	− 40	20	25.11
18	6½			5.448			24.80
				5.458			24.96
							+ .72

No. 206.

Oct. 12	6	1	48	59.805	− 39	5	56.52
13	6½			59.802			53.72
				59.803			55.12
							+ .59

No. 212.

Oct. 25	5½	1	50	8.156	− 42	59	52.53
26	5			8.123			52.13
				8.140			52.33
							+ 1.50

No. 218.

Oct. 17	5½	1	51	53.616	− 23	1	30.93
18	5			53.584			30.63
				53.600			30.78
							+ .11

No. 229.

Oct. 19	7	1	54	12.363	− 41	39	56.48
20	7			12.342			58.21
				12.352			57.34
							+ 1.07

No. 231.

Oct. 17	5	1	54	58.300	− 21	19	13.06
18	6			58.229			13.79
				58.264			13.42
							+ .09

No. 232.

Oct. 12		1	55	11.929	− 21	34	19.94
							+ .09
Obs. Lat. B. J.					37	20	26.77
Red. Lat.							27.04
							− .33

No. 235.

Oct. 25	6	1	55	26.525	− 42	31	24.22
26	6			26.596			24.35
				26.560			24.29
							+ 1.34

No. 241.

1898	Mag.	h	m	s	°	′	″
Nov. 3	6	1	56	41.431	− 30	29	32.68
9	5½			41.464			31.66
				41.448			32.17
							+ .25

No. 244.

Oct. 17	6	1	57	57.762	− 0	21	48.14
18	6			57.733			47.33
				57.748			47.73
							− .09

No. 246.

Oct. 19	7	1	58	17.830	− 4	49	14.29
20	6½			17.823			15.24
				17.827			14.77
							− .06

No. 247.

Oct. 13		1	58	34.855	− 0	49	45.90
Nov. 10				.805			45.85
14				.870			46.03
15				.826			45.93
16				.855			46.13
				34.842			45.97
							− .08
Obs. Lat. 303					37	20	25.71
Red. Lat.							25.97
							− .16

No. 248.

Oct. 25	5½	1	57	37.060	− 45	12	19.54
26	5			37.151			19.63
				37.106			19.59
							+ 2.56

No. 251.

Nov. 3	5	1	59	55.157	− 29	47	12.12
9	6			55.087			10.55
				55.122			11.33
							+ .24

No. 265.

Nov. 25		2	3	59.437	− 2	48	50.58
28				59.429			50.52
				59.433			50.55
							− .07
Obs. Lat. 303					37	20	25.17
Red. Lat.							25.41
							− .17

No. 270.

Nov. 3	6½	2	3	56.813	− 42	21	57.00
9	6¾			56.754			53.52
				56.783			55.26
							+ 1.28

No. 7.

1898	Mag.	h	m	s	°	′	″
Nov. 15	6	2	5	5.110	− 43	59	57.79
16	6			5.100			57.13
				5.105			57.46
							+ 1.92

No. 9.

Nov. 3	6	2	6	25.005	− 2	18	17.08
9	6			25.037			17.02
				25.021			17.05
							− .07

No. 10.

Nov. 10	6	2	5	37.449	− 41	20	59.21
14	6			37.462			53.37
				37.456			56.29
							+ .97

No. 14.

Nov. 30	6	2	6	0.889	− 44	17	54.26
Dec. 1	6½			0.732			53.59
				0.810			53.92
							+ 2.06

No. 17.

Nov. 25		2	7	34.077	− 2	52	23.36
28	8			34.034			23.23
S. prec.				34.056			23.30
							− .07

No. 18.

Nov. 15	6½	2	7	34.886	− 2	52	13.88
16	6½			34.852			13.71
N. fol.				34.869			13.80
							− .07

No. 26.

Nov. 10	7	2	8	32.748	− 3	30	31.90
14	7¼			32.793			32.21
				32.770			32.06
							− .07

No. 28.

Nov. 30		2	8	25.008	− 31	12	8.98
Dec. 1				24.944			8.65
2				25.020			8.66
12				24.965			8.61
				24.984			8.72
							+ .27
Obs. Lat. B. J.					37	20	24.98
Red. Lat.							25.19
							− .51

No. 42.

Nov. 3	6	2	10	24.341	− 41	38	34.24
9	6			24.307			32.75
				24.324			33.50
							+ 1.06

No. 44.

1898	Mag.	h m s	° ′ ″
Nov. 10	8¼	2 11 40.427	−3 22 39.33
14	8	40.405	40.52
		40.416	39.92
N. star			−.07

No. 47.

Nov. 3		2 11 53.755	−6 53 31.98
9		53.710	32.03
		53.732	32.00
			−.05
Obs. Lat. B. J.			37 20 26.12
Red. Lat.			26.30
			−.19

No. 48.

Nov. 15	7¼	2 11 52.847	−7 3 4.68
16	7¼	52.907	5.15
		52.877	4.91
			−.04

No. 50.

Nov. 30	6½	2 11 17.457	−41 32 43.39
Dec. 1	7	17.486	41.86
			42.62
			+1.03

No. 56.

Nov. 15		2 14 11.487	−3 26 27.20
16		11.497	27.04
		11.492	27.12
			−.07
Obs. Lat. B. J.			37 20 25.72
Red. Lat.			25.97
			−.17

No. 57.

Nov. 10	9	2 14 19.289	−3 26 6.81
14	8¾	19.329	6.96
Fol. star		19.309	6.89
			−.07

No. 58.

Nov. 25		2 14 33.165	−4 48 53.54
28	7¼	33.190	54.07
		33.178	53.80
			−.06

No. 59.

Nov. 3	6½	2 14 24.297	−26 25 42.31
9	6¼	24.320	41.92
		24.309	42.11
			+.16

No. 66.

Nov. 15	7½	2 16 30.685	−0 49 2.08
16	7	30.723	2.48
		30.704	2.28
			−.08

No. 67.

1898	Mag.	h m s	° ′ ″
Nov. 10	8½	2 16 27.973	−3 25 38.93
14	8½	27.905	39.16
		27.939	39.04
			−.07

No. 69.

Nov. 30	5½	2 16 42.959	−0 4 12.98
Dec. 1	6	43.017	13.73
		42.988	13.36
			−.09

No. 70.

Nov. 3	6	2 17 0.459	−1 20 57.10
9	6	0.525	57.47
		0.492	57.29
			−.08

No. 73.

Nov. 25		2 17 52.565	−24 16 47.66
28		52.543	47.88
		52.554	47.77
			+.13
Obs. Lat. 303			37 20 26.20
Red. Lat.			26.43
			−.37

No. 77.

Dec. 2	6	2 18 11.909	−43 40 2.50
12		11.850	39 59.23
		11.880	40 0.87
			+1.77

No. 80.

Nov. 15	6½	2 19 49.006	−3 14 30.11
16	6¼	49.099	30.69
		49.052	30.40
			−.07

No. 81.

Nov. 25		2 19 53.800	+0 10 33.58
28	8	53.883	33.13
		53.841	33.36
			−.09

No. 87.

Nov. 10		2 21 1.278	−12 45 1.76
14		1.316	1.77
		1.297	1.77
			.00
Obs. Lat. 303			37 20 25.87
Red. Lat.			26.13
			−.24

No. 90.

Nov. 3	6¼	2 20 27.597	−41 18 23.73
9	6	27.500	20.03
		27.549	21.88
			+.96

No. 99.

1898	Mag.	h m s	° ′ ″
Nov. 15	5½	2 23 42.796	−34 16 5.13
16	5½	42.871	6.24
		42.833	5.69
			+.36

No. 104.

Nov. 3	6½	2 25 15.928	−23 8 15.47
9	6½	15.924	14.82
		15.926	15.14
			+.11

No. 106.

Nov. 25		2 25 38.653	−25 38 28.71
28	6½	38.636	29.08
		38.644	28.90
			+.15

No. 107.

Nov. 10	6	2 25 53.777	−22 59 52.79
14	6	53.731	52.68
		53.754	52.73
			+.11

No. 108.

Nov. 15	7½	2 26 13.037	−15 35 14.75
16	7	12.992	14.40
		13.014	14.58
			+.02

No. 110.

Nov. 25		2 26 57.847	−1 29 6.84
28	5½	57.874	6.73
		57.860	6.79
			−.08

No. 113.

Nov. 30		2 27 15.157	−15 41 32.77
Dec. 1		15.175	32.08
		15.166	32.42
			+.03
Obs. Lat. 303			37 20 25.50
Red. Lat.			25.72
			−.27

No. 120.

Nov. 10	5½	2 28 51.900	−35 5 57.08
14	6½	51.896	55.78
		51.898	56.43
			+.39

No. 121.

Nov. 30	6	2 29 40.610	−8 18 17.12
Dec. 1	6	40.677	17.42
		40.643	17.27
			−.03

No. 122.

1898	Mag.	h m s	° ′ ″
Nov. 15	6	2 29 22.743	−28 40 49.52
16	6½	22.779	50.44
		22.761	49.98
N. fol. 5″ dup.			+.21

No. 124.

1898			
Nov. 25		2 30 13.026	−3 59 40.07
28	7	13.067	40.35
		13.047	40.21
			−.06

No. 127.

1898			
Nov. 10	8	2 30 25.475	−3 54 12.71
14	7¼	25.478	12.42
		25.477	12.57
			−.06

No. 131.

1898			
Nov. 15	6	2 30 58.822	−8 16 31.30
16	6	58.739	31.36
		58.780	31.33
			−.03

No. 137.

1898			
Nov. 3	5	2 31 45.411	−30 29 23 14
9		45.392	22.28
		45.401	22.71
			+.25

No. 138.

1898			
Nov. 30		2 32 33.428	−3 50 15.65
Dec. 1		33.425	15.85
		33.427	15.75
			−.07
Obs. Lat. 303			37 20 25.70
Red. Lat.			25.92
			−.17

No. 141.

1898			
Nov. 10	5½	2 32 44.516	−35 0 52.30
14	6	44.540	50.25
		44.528	51.28
			+.39

No. 144.

1898			
Nov. 25		2 34 15.179	−0 6 41.07
28		15.173	40.90
		15.176	40.99
			−.09
Obs. Lat. B. J.			37 20 25.37
Red. Lat.			25.60
			−.15

No. 145.

1898			
Nov. 30	7½	2 34 21.574	−12 11 18.94
Dec. 1	7¾	21.601	19.09
		21.588	19.01
			−.01

No. 147.

1898	Mag.	h m s	° ′ ″
Nov. 15	6	2 33 54.742	−30 38 1.14
16	6	54.856	0.25
		54.799	0.70
			+.25

No. 149.

1898			
Nov. 3	5	2 34 37.772	−12 18 18.78
9	5	37.835	19.42
		37.803	19.10
			.00

No. 152.

1898			
Nov. 10 (5)		2 36 0.450	−1 7 45.93
14	6½	0.412	46.57
S. fol. 3″ dup.		0.431	46.25
			−.08

No. 158.

1898			
Nov. 25		2 35 54.747	−43 19 52.57
28	5	54.671	48.68
		54.709	50.62
			+1.63

No. 159.

1898			
Nov. 15	4	2 36 38.506	−40 17 32.37
16	4	38.555	33.28
		38.530	32.82
			+.72

No. 168.

1898			
Nov. 3	6	2 38 2.885	−38 49 10.45
9	6¼	2.931	9.56
		2.908	10.00
			+.57

No. 170.

1898			
Nov. 10		2 39 16.008	−14 17 26.16
14		16.118	26.54
		16.063	26.35
			+.01
Obs. Lat. B. J.			37 20 25.62
Red. Lat.			25.88
			−.25

No. 173.

1898			
Nov. 30	6½	2 39 22.598	−40 57 42.53
Dec. 1	6½	22.775	43.69
		22.687	43.11
			+.87

No. 175.

1898			
Nov. 15	5	2 40 20.548	−19 0 15.80
16	5	20.563	15.95
		20.556	15.88
			+.06

No. 176.

1898			
Nov. 25		2 40 3.794	−32 57 21.96
28	6¼	3.779	20.65
		3.787	21.30
			+.32

No. 187.

1898	Mag.	h m s	° ′ ″
Nov. 3	7½	2 42 52.494	−37 46 22.75
9	7½	52.473	22.00
		52.483	22.38
			+.51

No. 189.

1898			
Nov. 10	6	2 43 25.473	−35 58 35.97
14	6½	25.523	33.56
		25.498	34.77
			+.43

No. 194.

1898			
Nov. 25		2 44 33.684	−37 49 38.93
28	7½	33.627	38.35
Dup. N. prec.		33.656	38.64
			+.51

No. 195.

1898			
Nov. 15	5	2 44 49.368	−32 50 3.13
16	5½	49.305	3.57
		49.337	3.35
			+.31

No. 196.

1898			
Dec. 2	8	2 45 1.839	−32 48 9.83
12		2.007	9.64
N. fol.		1.923	9.73
			+.31

No. 197.

1898			
Nov. 30	7½	2 45 6.672	−31 14 15.42
Dec. 1	7½	6.701	14.18
		6.687	14.80
			+.24

No. 198.

1898			
Nov. 10	5	2 45 19.839	−24 58 48.38
14	6	19.803	47.32
		19.821	47.85
			+.14

No. 200.

1898			
Nov. 3	5	2 45 29.099	−28 21 54.52
9	6	29.059	55.18
		29.079	54.85
			+.20

No. 202.

1898			
Nov. 15		2 46 24.676	−21 25 28.04
16		24.641	28.57
		24.659	28.30
			+.09
Obs. Lat. B. J.			37 20 25.38
Red. Lat.			25.62
			−.33

No. 204.

1898	Mag.	h	m	s	°	′	″
Nov. 25		2	46	7.306	−36	15	59.32
28	5			7.308			58.47
				7.307			58.90
							+.44

No. 205.

1898							
Dec. 2	5	2	46	33.089	−36	5	45.36
12				33.078			44.08
				33.083			44.72
							+.43

No. 207.

1898							
Nov. 30	6½	2	46	51.224	−40	21	12.10
Dec. 1	6½			51.104			12.98
				51.164			12.54
							+.72

No. 208.

1898							
Nov. 3	6	2	47	37.138	−31	14	12.72
9	6½			37.104			12.41
				37.121			12.57
							+.27

No. 209.

1898							
Nov. 10	7½	2	48	28.034	−9	15	53.94
14	7¼			28.025			54.27
				28.030			54.10
							−.03

No. 216.

1898							
Nov. 15	6	2	49	34.619	−38	51	16.11
16	6½			34.552			16.68
				34.586			16.40
							+.57

No. 219.

1898							
Nov. 25		2	51	26.656	−9	18	15.19
28				26.684			14.79
				26.670			14.99
							−.03
Obs. Lat. B. J.					37	20	25.61
Red. Lat.							25.84
							−.21

No. 225.

1898							
Nov. 3	5½	2	52	51.616	−24	16	16.49
9	5½			51.664			17.19
				51.640			16.84
							+.13

No. 226.

1898							
Nov. 15	6½	2	52	54.131	−30	15	55.52
16	6½			54.073			55.84
				54.102			55.68
							+.24

No. 229.

1898	Mag.	h	m	s	°	′	″
Nov. 25		2	53	33.455	−24	0	59.70
28	6			33.459			59.58
				33.457			59.64
							+.13

No. 231.

1898							
Nov. 3		2	54	32.163	−2	52	15.54
9	6			32.088			15.03
				32.126			15.29
							−.07

No. 232.

1898							
Dec. 2	6½	2	53	34.173	−38	36	5.22
12				34.093			1.05
				34.133			3.13
							+.56

No. 238.

1898							
Nov. 15	4	2	54	23.644	−40	42	49.13
16	4			23.623			50.10
Nov. 30	5			23.633			49.61
Dec. 1	5						+.81

No. 239.

1898							
Nov. 30	6	2	54	24.451	−40	42	50.00
Dec. 1	6			24.453			50.90
Fol. star				24.452			50.45
							+.81

No. 240.

1898							
Nov. 25		2	55	42.472	−3	17	0.81
28	6½			42.481			0.57
				42.477			0.69
							−.07

No. 241.

1898							
Nov. 10	5½	2	55	6.807	−25	40	59.63
14	5½			6.728			58.39
				6.768			59.01
							+.15

No. 242.

1898							
Nov. 30	6	2	56	9.084	−8	3	53.59
Dec. 1	6¼			9.114			53.91
				9.099			53.75
							−.04

No. 243.

1898							
Dec. 2	6	2	55	26.011	−32	54	49.67
12				26.065			48.17
				26.038			48.92
							+.32

No. 247.

1898							
Nov. 15	5½	2	57	41.837	−8	5	11.58
16	5½			41.775			10.98
				41.806			11.28
							−.04

No. 248.

1898	Mag.	h	m	s	°	′	″
Nov. 10	6	2	57	13.869	−28	28	56.03
14	6			13.783			54.95
				13.826			55.49
							+.21

No. 249.

1898							
Nov. 3		2	57	53.650	−24	1	29.02
9				.613			28.18
Dec. 2				.649			28.65
12				.687			28.43
				53.650			28.57
							+.13
Obs. Lat. 303						37	20 26.45
Red. Lat.							26.69
							−.37

No. 252.

1898							
Nov. 25		2	59	15.840	−7	59	59.52
28	5			15.865			59.02
				15.852			59.27
							−.04

No. 258.

1898							
Nov. 10	6	3	0	15.825	−44	17	50.39
14	6½			15.839			49.70
				15.832			50.04
							+2.06

No. 267.

1898							
Nov. 3	6	3	3	29.415	−28	13	20.46
9	6			29.375			20.12
				29.395			20.29
							+.20

No. 8.

1898							
Nov. 10		3	7	34.056	−1	34	38.66
14				33.989			39.71
				34.022			39.19
							−.08
Obs. Lat. 303						37	20 25.77
Red. Lat.							26.03
							−.16

No. 10.

1898							
Nov. 3	7	3	7	31.822	−29	32	44.53
9	7			31.796			43.95
				31.809			44.24
							+.23

No. 13.

1898							
Nov. 15		3	7	44.325	−29	23	20.12
16				44.264			20.23
				44.294			20.18
							+.23
Obs. Lat. B. J.						37	20 24.42
Red. Lat.							24.68
							−.47

No. 17.

1898	Mag.	h	m	s	°	′	″
Nov. 25		3	9	1.713	−36	19	34.12
28				1.746			. .
Dec. 2	6			1.633			33.65
				1.697			33.89
							+.44

No. 18.

1898	Mag.	h	m	s	°	′	″
Nov. 15	6¼	3	9	22.659	−30	11	6.49
16	6			22.645			6.05
				22.652			6.27
							+.24

No. 19.

1898.	Mag.	h	m	s	°	′	″
Nov. 30	6	3	8	50.768	−44	48	10.05
Dec. 1	6			50.898			12.71
				50.833			11.38
							+2.33

No. 20.

1898	Mag.	h	m	s	°	′	″
Nov. 10	6½	3	10	34.270	−9	8	52.02
14	6			34.258			52.08
				34.264			52.05
							−.03

No. 22.

1898	Mag.	h	m	s	°	′	″
Nov. 30		3	10	52.633	−9	11	54.33
Dec. 1				52.685			55.22
				52.659			54.78
							−.03
Obs. Lat. 303					37	20	25.60
Red. Lat.							25.82
							−.21

No. 24.

1898	Mag.	h	m	s	°	′	″
Nov. 3	6½	3	10	37.089	−26	28	42.51
9	6½			37.014			42.74
				37.051			42.62
							+.17

No. 25.

1898	Mag.	h	m	s	°	′	″
Nov. 25		3	10	39.422	−35	56	14.51
28				39.354			. .
Dec. 2	6½			39.390			13.92
				39.389			14.21
							+.43

No. 26.

1898	Mag.	h	m	s	°	′	″
Nov. 15	6	3	11	39.096	−9	31	55.19
16	6			39.079			54.96
				39.088			55.08
							−.03

No. 31.

1898	Mag.	h	m	s	°	′	″
Nov. 3	6	3	13	9.145	−1	18	6.02
9	5			9.216			6.52
				9.180			6.27
							−.08

No. 35.

1898	Mag.	h	m	s	°	′	″
Nov. 10	7	3	12	32.932	−36	3	60.60
14	6¾			32.957			58.85
				32.944			59.72
							+.43

No. 39.

1898	Mag.	h	m	s	°	′	″
Nov. 30	5	3	13	51.519	−22	53	3.18
Dec. 1	5			51.479			3.38
				51.499			3.28
							+.11

No. 43.

1898	Mag.	h	m	s	°	′	″
Nov. 25		3	14	58.759	−22	7	46.08
28				58.723			45.31
				58.741			45.70
							+.10
Obs. Lat. 303						37	20 26.64
Red. Lat.							26.87
							−.34

No. 47.

1898	Mag.	h	m	s	°	′	″
Nov. 3		3	15	51.545	−43	27	41.51
9	4			51.506			37.43
				51.526			39.47
							+1.69

No. 69.

1898	Mag.	h	m	s	°	′	″
Nov. 25		3	21	59.316	−36	16	43.08
28	7¼			59.286			40.72
				59.301			41.90
							+.44

No. 73.

1898	Mag.	h	m	s	°	′	″
Nov. 30	7	3	22	33.071	−41	59	42.96
Dec. 1	6½			33.135			43.30
				33.103			43.13
							+1.17

No. 76.

1898	Mag.	h	m	s	°	′	″
Nov. 3	6	3	23	36.320	−36	2	11.80
9	6			36.218			9.65
				36.269			10.72
							+.43

No. 79.

1898	Mag.	h	m	s	°	′	″
Nov. 10	6½	3	24	15.424	−36	12	24.73
14	7			15.441			23.03
				15.432			23.88
							+.44

No. 80.

1898	Mag.	h	m	s	°	′	″
Nov. 15		3	25	33.265	−5	25	29.62
16				.308			29.61
30				.290			29.30
Dec. 1				.282			29.73
				33.286			29.57
							−.06
Obs. Lat. 303						37	20 25.95
Red. Lat.							26.19
							−.18

No. 81.

1898	Mag.	h	m	s	°	′	″
Nov. 25		3	24	13.158	−44	12	36.75
Dec. 2	6½			12.978			40.88
12				12.999			37.05
				13.045			38.23
							+2.02

No. 88.

1898	Mag.	h	m	s	°	′	″
Nov. 3	6	3	26	35.613	−41	42	53.84
9	6½			35.429			51.89
				35.521			52.87
							+1.08

No. 89.

1898	Mag.	h	m	s	°	′	″
Nov. 10		3	28	7.353	−9	48	12.12
14				.417			11.99
Dec. 2				.424			12.64
12				.420			12.97
				7.403			12.43
							−.02
Obs. Lat. B. J.						37	20 25.11
Red. Lat.							25.34
							−.22

No. 95.

1898	Mag.	h	m	s	°	′	″
Nov. 3	5	3	29	16.930	−21	58	30.01
9	5			16.904			30.13
				16.917			30.07
							+.10

No. 98.

1898	Mag.	h	m	s	°	′	″
Nov. 10	6½	3	31	33.231	+0	15	18.17
14	7			33.208			17.74
Dup. N. fol.				33.220			17.96
							−.09

No. 100.

1898.	Mag.	h	m	s	°	′	″
Nov. 15	5	3	31	39.909	+0	4	40.45
16	5			39.907			40.86
				39.908			40.66
							−.09

No. 101.

1898	Mag.	h	m	s	°	′	″
Nov. 3		3	31	38.529	−17	48	16.60
9				38.541			17.28
				38.535			16.94
							+.05
Obs. Lat. 303						37	20 25.70
Red. Lat.							25.97
							−.29

No. 108.

1898	Mag.	h	m	s	°	′	″
Nov. 25		3	32	21.594	−44	3	17.93
Dec. 2				.666			. .
12				.662			16.10
				21.641			17.01
							+1.94

No. 109.

1898	Mag.	h m s	° ′ ″
Nov. 10	6	3 33 58.921	− 5 57 11.67
14	6¼	58.897	11.90
		58.909	11.79
			−.05

No. 113.

1898			
Nov. 30	5	3 33 26.074	− 40 36 35.58
Dec. 1	4	26.064	37.40
		26.069	36.49
			+.78

No. 114.

1898			
Nov. 3	6	3 34 33.021	− 28 16 34.65
9	6	33.025	35.00
		33.023	34.82
			+.20

No. 116.

1898			
Nov. 25		3 35 35.281	− 5 32 24.80
28	5½	35.255	24.45
		35.268	24.62
			−.05

No. 117.

1898			
Nov. 15	8	3 34 49.325	− 28 21 7.56
16	8	49.358	7.73
		49.341	7.64
			+.20

No. 126.

1898			
Nov. 30	7½	3 36 6.744	− 40 40 58.60
Dec. 1	7½	6.821	61.95
		6.782	41 0.27
			+.80

No. 134.

1898			
Nov. 3		3 38 21.637	− 10 6 30.24
9		21.658	30.35
		21.648	30.30
			−.02
Obs. Lat. B. J.			37 20 25.90
Red. Lat.			26.17
			−.22

No. 138.

1898			
Nov. 25		3 38 41.448	− 10 48 31.48
28	5½	41.460	30.27
		41.454	30.88
			−.02

No. 140.

1898			
Nov. 15	7½	3 37 32.751	− 41 5 44.40
16	7½	32.719	44.75
		32.735	44.58
			+.91

No. 142.

1898	Mag.	h m s	° ′ ″
Nov. 10	5	3 38 11.561	− 32 15 53.22
14	5½	11.523	50.69
		11.542	51.96
			+.30

No. 143.

1898			
Nov. 30		3 39 19.618	− 1 29 5.86
Dec. 1		19.624	6.35
		19.621	6.10
			−.08
Obs. Lat. 303			37 20 26.57
Red. Lat.			26.79
			−.16

No. 145.

1898			
Nov. 10	5½	3 39 43.406	− 0 37 3.76
14	6	43.456	3.81
		43.431	3.79
			−.08

No. 149.

1898			
Nov. 15	5	3 39 3.156	− 37 38 9.17
16	5	3.122	8.67
		3.139	8.92
			+.50

No. 154.

1898			
Nov. 3	5	3 41 19.173	− 12 25 17.64
9	4	19.175	17.61
		19.174	17.62
			.00

No. 168.

1898			
Nov. 15		3 42 27.613	− 23 33 5.21
16		.564	5.17
Dec. 2		.523	4.51
12		.551	4.64
		27.563	4.88
			+.12
Obs. Lat. B. J.			37 20 25.62
Red. Lat.			25.85
			−.36

No. 169.

1898			
Nov. 30	6	3 42 17.921	− 29 39 19.17
Dec. 1	6	18.071	19.77
		17.996	19.47
			+.23

No. 173.

1898			
Nov. 10	5	3 43 16.477	− 24 11 27.95
14	5½	16.438	26.56
		16.458	27.26
			+.13

No. 174.

1898			
Nov. 25		3 43 13.179	− 29 46 57.88
28	7	13.163	56.62
		13.171	57.25
			+.23

No. 176.

1898	Mag.	h m s	° ′ ″
Nov. 15	6	3 43 48.770	− 30 28 31.08
16	5½	48.682	31.43
		48.726	31.24
			+.25

No. 180.

1898			
Nov. 3	7	3 43 59.476	− 36 25 14.54
9	6½	59.342	12.31
		59.409	13.42
			+.44

No. 181.

1898			
Nov. 25	7	3 45 17.191	− 5 23 7.14
28	7½	17.211	7.14
		17.201	7.14
			−.06

No. 182.

1898			
Nov. 30	6	3 44 49.730	− 37 56 4.26
Dec. 1	6	49.738	4.75
S. prec.		49.734	4.50
			+.52

No. 183.

1898			
Nov. 10	5	3 44 49.983	− 37 55 57.28
14	5	50.012	54.95
N. fol.		49.998	56.11
			+.52

No. 189.

1898			
Nov. 3	4	3 45 38.221	− 36 30 35.50
9	5	38.151	33.07
		38.186	34.29
			+.45

No. 190.

1898			
Nov. 15	6½	3 47 27.797	− 5 21 37.22
16	6½	27.734	36.99
		27.766	37.10
			−.06

No. 191.

1898			
Nov. 25		3 47 39.226	− 5 39 57.84
28		.210	57.18
Dec. 2		.201	57.22
12		.243	57.26
N. prec.		39.220	57.38
			−.05
Obs. Lat. 303			37 20 25.86
Red. Lat.			26.07
			−.19

No. 193.

1898			
Nov. 30	7	3 47 3.926	− 39 17 27.79
Dec. 1	7	4.022	28.77
		3.974	28.28
			+.60

No. 195.

1898	Mag.	h	m	s	°	′	″
Nov. 10	5	3	49	10.038	−3	15	23.07
14	5			10.048			23.05
S. fol.				10.043			23.06
							−.07

No. 198.

1898	Mag.	h	m	s	°	′	″
Nov. 30	5	3	49	22.327	−24	54	51.66
Dec. 1	5½			22.235			51.22
				22.281			51.44
							+.14

No. 200.

1898	Mag.	h	m	s	°	′	″
Nov. 15	7½	3	50	6.196	−5	16	34.26
16	7½			6.233			33.52
				6.214			33.89
							−.06

No. 202.

1898	Mag.	h	m	s	°	′	″
Nov. 3	6	3	49	45.793	−35	2	4.19
9	5½			45.683			2.38
				45.738			3.29
							+.39

No. 205.

1898	Mag.	h	m	s	°	′	″
Nov. 30	6	3	51	42.562	−13	53	39.27
Dec. 1	6½			42.549			39.90
				42.556			39.59
							+.01

No. 206.

1898	Mag.	h	m	s	°	′	″
Nov. 10	5½	3	50	48.816	−40	39	30.22
14	6½			48.816			26.08
				48.816			28.15
							+.80

No. 209.

1898	Mag.	h	m	s	°	′	″
Nov. 25		3	51	35.796	−39	3	26.96
Dec. 2	7			35.781			26.91
				35.789			26.93
							+.59

No. 210.

1898	Mag.	h	m	s	°	′	″
Nov. 10		3	53	16.214	−13	47	55.49
14				16.172			55.51
				16.193			55.50
							+.01
Obs. Lat. B. J.					37	20	25.76
Red. Lat.							26.02
							−.25

No. 216.

1898	Mag.	h	m	s	°	′	″
Nov. 3	7	3	52	50.329	−39	15	29.51
9	6¾			50.293			27.68
				50.311			28.60
							+.60

No. 221.

1898	Mag.	h	m	s	°	′	″
Nov. 3	5	3	55	34.547	−24	18	20.79
9	5			34.510			20.48
				34.529			20.63
							+.13

No. 222.

1898	Mag.	h	m	s	°	′	″
Nov. 15	6	3	56	21.860	−1	50	7.91
16	5½			21.830			7.28
				21.845			7.60
							−.08

No. 225.

1898	Mag.	h	m	s	°	′	″
Nov. 10	7½	3	57	6.946	−1	54	59.43
14	7			6.983			59.05
				6.964			59.24
							−.08

No. 226.

1898	Mag.	h	m	s	°	′	″
Nov. 3	5	3	57	23.005	−0	32	45.01
9	6			22.985			44.97
				22.995			44.99
							−.08

No. 229.

1898	Mag.	h	m	s	°	′	″
Nov. 25		3	56	36.447	−30	46	41.78
28	6			36.407			40.14
				36.427			40.96
							+.26

No. 230.

1898	Mag.	h	m	s	°	′	″
Nov. 30	7	3	56	0.231	−44	12	27.32
Dec. 1	7			0.266			26.94
				0.249			27.13
							+2.01

No. 241.

1898	Mag.	h	m	s	°	′	″
Nov. 15	7½	3	58	13.249	−28	48	48.50
16	7			13.209			47.70
				13.229			48.10
							+.21

Lacl. 1326.

1899	Mag.	h	m	s	°	′	″
Feb. 9	6½	3	58	10.732	−34	45	46.26
10	6½			10.797			47.22
				10.764			46.74
							+.38

No. 251.

1898	Mag.	h	m	s	°	′	″
Dec. 2	5½	4	1	25.153	−27	55	51.73
12				25.187			51.49
				25.170			51.61
							+.19

No. 262.

1898	Mag.	h	m	s	°	′	″
Nov. 25		4	4	43.358	−3	50	31.20
28	7			43.390			31.00
				43.374			31.10
							−.06

No. 2.

1898	Mag.	h	m	s	°	′	″
Dec. 2	8	4	4	41.996	−20	58	22.16
12				42.000			22.39
				41.998			22.27
							+.08

No. 3.

1898	Mag.	h	m	s	°	′	″
Dec. 22	5½	4	5	23.920	−7	11	25.02
23	5½			23.851			26.00
				23.886			25.51
							−.04

No. 11.

1898	Mag.	h	m	s	°	′	″
Dec. 2		4	6	53.107	−7	6	12.52
12				53.118			12.30
15				53.122			12.47
				53.116			12.43
							−.04
Obs. Lat. B. J.					37	20	25.13
Red. Lat.							25.32
							−.20

No. 15.

1898	Mag.	h	m	s	°	′	″
Nov. 25		4	7	41.553	−7	5	46.18
28	9			41.579			45.97
				41.566			46.07
							−.04

No. 20.

1898	Mag.	h	m	s	°	′	″
Nov. 30		4	7	24.463	−42	15	37.78
Dec. 1	5			24.470			39.21
				24.467			38.50
							+1.25

No. 26.

1898	Mag.	h	m	s	°	′	″
Dec. 22		4	9	32.477	−10	30	34.37
23				32.466			34.71
				32.471			34.54
							−.02
Obs. Lat. 303					37	20	25.65
Red. Lat.							25.80
							−.22

No. 29.

1898	Mag.	h	m	s	°	′	″
Nov. 25		4	10	34.473	−7	48	44.61
28	5			34.485			44.79
				34.479			44.70
							−.04

No. 30.

1898	Mag.	h	m	s	°	′	″
Dec. 27	6	4	9	16.827	−44	37	43.97
30				16.817			47.02
				16.822			45.50
							+2.23

No. 34.

1898	Mag.	h	m	s	°	′	″
Nov. 30	5	4	10	37.253	−42	32	50.16
Dec. 1	4			37.372			49.18
				37.312			49.67
							+1.34

No. 50.

1898	Mag.	h	m	s	°	′	″
Nov. 30	4	4	14	2.054	−34	2	52.09
Dec. 1	4			2.147			51.75
				2.100			51.92
							+.35

No. 52.

Dec. 2	7	4	15	36.049	−0	10	6.48
12	7			36.043			6.59
				36.046			6.53
							−.09

No. 55.

Nov. 30	6½	4	16	14.196	−0	20	14.32
Dec. 1	6			14.207			14.53
				14.201			14.42
							−.09

No. 56.

Dec. 22	6½	4	15	26.523	−25	16	13.39
23	6¼			26.526			13.74
				26.524			13.56
							+.15

No. 65.

Dec. 27	5½	4	16	3.059	−44	30	45.46
30				3.064			50.21
				3.061			47.83
							+2.16

No. 68.

Nov. 25		4	17	17.272	−25	58	7.40
28	6			17.304			6.29
				17.288			6.85
							+.16

No. 72.

Dec. 2		4	18	36.082	−3	58	52.60
12				.051			52.30
15				.054			52.65
				36.062			52.52
							−.06
Obs. Lat. 303					37	20	25.39
Red. Lat.							25.59
							−.18

No. 72.

Jan. 23		4	18	39.017	−3	58	44.36
26				39.006			43.83
27				39.042			44.22
28				39.036			44.33
30				39.021			43.48
Feb. 6				39.004			43.39
7				38.999			43.77
8				39.013			44.52
				39.017			43.99
							−.06
Obs. Lat. 303					37	20	25.51
Red. Lat.							25.52
							−.18

No. 81.

1898	Mag.	h	m	s	°	′	″
Nov. 30	6½	4	19	23.216	−35	46	58.47
Dec. 1	6½			23.213			57.16
				23.214			57.81
							+.42

No. 85.

Nov. 25		4	20	12.352	−34	15	13.74
28	4			12.276			13.37
				12.314			13.55
							+.36

No. 92.

Dec. 2	6	4	21	9.644	−34	59	17.25
12	6½			9.698			16.23
				9.671			16.74
							+.39

No. 98.

Nov. 30	6½	4	22	6.583	−44	23	42.52
Dec. 1	6½			6.876			44.51
				6.730			43.51
							+2.11

No. 110.

Nov. 30		4	26	39.538	−0	15	45.96
Dec. 1				.470			45.85
27				.553			45.82
30				.453			45.54
				39.503			45.79
							−.09
Obs. Lat. 303					37	20	25.59
Red. Lat.							25.77
							−.15

No. 110.

Feb. 9		4	26	42.557	−0	15	37.70
10				42.527			38.34
				42.542			38.02
							−.09
Obs. Lat. 303					37	20	25.74
Red. Lat.							25.74
							−.15

No. 115.

Nov. 25		4	26	22.997	−30	39	57.18
28	6½			22.987			56.61
				22.992			56.89
							+.26

No. 118.

Dec. 2	5½	4	26	57.463	−35	52	28.93
12	6½			57.433			29.15
				57.448			29.04
							+.42

No. 121.

Nov. 25		4	28	56.426	−6	57	10.51
28	5			56.490			10.05
				56.458			10.28
							−.05

No. 124.

1899	Mag.	h	m	s	°	′	″
Jan. 23	6½	4	27	32.110	−41	23	28.04
26	6½			32.094			28.73
				32.102			28.38
							+.99

Anon.

Dec. 1	6	4	28	43.660	−8	28	13.38
							−.03

No. 126.

Nov. 30	5	4	29	16.752	−8	26	41.49
Dec. 15	5			16.837			41.44
				16.794			41.47
							−0.3

No. 129.

Jan. 30	5½	4	27	44.481	−45	10	15.93
Feb. 6	5			44.612			16.04
				44.546			15.98
							+2.54

No. 130.

Jan. 27	5	4	29	32.816	−29	58	15.44
28	5			32.799			14.89
				32.807			15.16
							+.24

No. 131.

Dec. 27	7½	4	30	26.403	−8	30	8.52
30	7			26.357			8.28
				26.380			8.40
							−.03

No. 132.

Dec. 2	6½	4	29	58.153	−28	39	41.80
12	7½			58.107			41.02
				58.130			41.41
							+.21

No. 133.

Nov. 25		4	31	13.340	−3	33	40.06
28				13.327			39.36
				13.333			39.71
							−.07
Obs. Lat. B. J.					37	20	25.53
Red. Lat.							25.77
							−.17

No. 139.

Nov. 30	7¼	4	31	55.730	−8	40	3.64
Dec. 1	6¾			.750			4.25
2	6½			.742			3.90
				55.741			3.93
							−.03

No. 140.

Dec. 22	5	4	32	28.029	−2	40	38.40
23	5			27.984			39.04
				28.006			38.72
							−.07

No. 141.

1898	Mag.	h m s	° ′ ″
Dec. 2		4 32 15.566	−8 37 . .
12	7	15.645	59.05
15	7½	15.695	58.92
		15.635	58.98
			−.03

No. 142.

1899			
Feb. 9	7	4 32 38.385	−2 50 57.23
10	7	38.377	57.36
		38.381	57.29
			−.07

No. 144.

1899			
Feb. 7	4	4 31 37.395	−30 46 8.74
8	4	37.401	9.33
		37.398	9.03
			+.26

No. 150.

1899			
Feb. 7		4 33 33.247	−14 30 4.23
8		33.208	3.98
		33.227	4.10
			+.01
Obs. Lat. B. J.			37 20 23.96
Red. Lat.			23.94
			−.25

No. 151.

1899			
Jan. 23	6	4 32 55.690	−30 55 16.62
26	6	55.700	16.39
		55.695	16.51
			+.26

No. 152.

1898			
Nov. 25		4 33 57.530	−8 25 37.60
28	7	57.534	36.76
		57.532	37.18
			−.03

No. 153.

1899			
Jan. 27		4 33 9.458	−30 38 3.20
28	6½	9.625	2.55
		9.541	2.87
			+.25

No. 154.

1898			
Nov. 30	6	4 34 8.076	−12 19 30.42
Dec. 1	5½	8.117	30.93
		8.096	30.67
			.00

No. 155.

1898			
Dec. 2	5½	4 34 36.113	−1 15 11.07
12	5½	36.089	10.75
		36.101	10.91
			−.08

No. 156.

1899	Mag.	h m s	° ′ ″
Jan. 30	8	4 33 51.513	−31 36 43.76
Feb. 6	8	51.419	43.99
		51.466	43.87
			+.28

No. 157.

1898			
Dec. 27	5½	4 34 38.261	−14 33 25.41
30	5½	38.177	25.73
		38.219	25.57
			+.01

No. 160.

1899			
Feb. 9	6¾	4 34 1.935	−42 4 37.49
10	6½	1.861	37.28
		1.898	37.39
			+1.19

No. 166.

1899			
Jan. 23		4 36 1.366	−19 51 55.01
26		1.350	55.59
		1.358	55.30
			+.07
Obs. Lat. 303			37 20 26.23
Red. Lat.			26.28
			−.31

No. 167.

1898			
Dec. 22	5½	4 35 52.216	−24 40 55.82
23	5¾	52.184	54.90
		52.200	55.36
			+.14

No. 171.

1898			
Nov. 25		4 38 4.011	−23 22 17.93
28	6½	4.005	18.17
		4.008	18.05
			+.12

No. 172.

1898			
Nov. 30	7	4 38 41.108	−8 59 6.66
Dec. 1	7	41.125	6.10
		41.116	6.38
			−.03

No. 173.

1899			
Feb. 9	6½	4 38 44.429	−8 59 5.73
10	6½	44.385	6.29
		44.407	6.01
			−.03

No. 174.

1898			
Dec. 27	7	4 39 0.355	−3 21 25.73
30	7½	0.303	25.90
		0.329	25.81
			−.07

No. 175.

1899	Mag.	h m s	° ′ ″
Jan. 27	4	4 37 18.456	−42 3 24.96
28	4	18.512	25.63
		18.484	25.30
			+1.19

No. 178.

1899			
Feb. 7	6	4 39 14.159	−8 41 32.42
8	6	14.069	31.50
		14.114	31.96
			−.03

No. 181.

1898			
Dec. 2	5	4 38 27.028	−37 20 38.77
15	5	27.183	39.04
		27.106	38.91
			+.49

No. 182.

1899			
Jan. 30	5½	4 39 15.129	−30 57 11.62
Feb. 6	5½	15.100	12.32
		15.114	11.97
			+.26

No. 183.

1898			
Dec. 22		4 40 24.087	−3 26 29.35
23		24.053	30.17
		24.070	29.76
			−.07
Obs. Lat. B. J.			37 20 25.45
Red. Lat.			25.60
			−.17

No. 186.

1898			
Nov. 30	6	4 40 40.857	−21 28 13.11
Dec. 1	5½	41.000	14.21
		40.928	13.66
			+.09

No. 188.

1898			
Nov. 25		4 40 24.145	−28 8 16.28
28	7	24.135	15.21
		24.140	15.75
			+.20

No. 192.

1898			
Dec. 2	6	4 40 23.051	−41 15 16.80
15	6	23.113	18.61
		23.082	17.71
			+.95

No. 196.

1899			
Jan. 23	6	4 42 5.387	−34 11 19.84
26	6½	5.355	20.47
		5.371	20.15
			+.36

No. 197.

1898	Mag.	h	m	s	°	′	″
Dec. 27	6	4	42	21.451	−28	16	19.00
30	6			21.511			20.29
				21.481			19.64
							+.20

No. 198.

1898							
Nov. 25		4	43	1.457	−17	7	16.64
28	5½			1.494			15.58
				1.476			16.11
							+.04

No. 202.

1899							
Jan. 27	6	4	42	30.723	−39	32	20.48
28	6			30.819			20.33
				30.771			20.40
							+.62

No. 206.

1898							
Dec. 2	5½	4	43	57.071	−16	30	36.40
12				57.179			36.84
				57.125			36.62
							+.03

No. 210.

1898							
Nov. 30	6½	4	43	50.813	−30	12	13.53
Dec. 1	6			50.861			12.55
				50.837			13.04
							+.24

No. 215.

1899							
Jan. 27		4	45	38.428	−16	23	33.58
28				38.428			33.06
				38.428			33.32
							+.03
Obs. Lat. 303						37	20 25.21
Red. Lat.							25.24
							−.27

No. 219.

1898							
Nov. 30	8	4	46	40.517	−5	32	53.76
Dec. 1	8			40.550			54.04
				40.533			53.90
							−.05

No. 220.

1898							
Dec. 22	7½	4	45	26.787	−35	15	53.52
23	7½			26.831			52.19
				26.809			52.86
							+.40

No. 221.

1899							
Jan. 23	6½	4	45	27.350	−44	9	28.06
26	6			27.341			30.05
				27.346			29.05
							+2.00

No. 223.

1898	Mag.	h	m	s	°	′	″
Nov. 25		4	46	10.568	−35	16	47.90
28	7½			10.541			47.96
				10.554			47.93
							+.40

No. 224.

1898							
Dec. 27	7½	4	47	44.989	−5	27	23.51
30	7			45.055			22.80
				45.022			23.16
							−.05

No. 227.

1898							
Nov. 25		4	47	52.946	−5	37	24.17
28	4			52.892			23.11
				52.919			23.64
							−.05

No. 230.

1898							
Dec. 2	6½	4	46	57.117	−41	29	49.22
15	6			57.230			51.78
				57.173			50.50
							+1.02

No. 237.

1899							
Jan. 30	6	4	47	47.750	−35	4	33.38
Feb. 6	5½			47.691			33.72
				47.720			33.55
							+.39

No. 238.

1898							
Nov. 30	6½	4	49	21.864	−3	23	31.69
Dec. 1	6½			21.863			31.46
				21.863			31.57
							−.07

No. 248.

1898							
Nov. 25		4	51	3.737	−5	29	6.90
28	7½			3.819			6.48
				3.778			6.69
							−.05

No. 250.

1898							
Dec. 2	5	4	51	22.649	−5	19	58.10
12				22.653			57.92
				22.651			58.01
							−.06

No. 260.

1898							
Nov. 30	6	4	51	29.796	−39	47	35.24
Dec. 1	6			29.910			36.03
				29.853			35.64
							+.64

No. 268.

1898							
Nov. 25		4	54	13.476	−17	57	47.35
28	7¼			13.422			46.36
				13.449			46.85
							+.05

No. 270.

1898	Mag.	h	m	s	°	′	″
Dec. 2	7	4	54	35.706	−10	30	28.71
15	7			35.840			27.73
				35.773			28.22
							−.02

No. 271.

1898							
Dec. 22	5	4	55	0.804	−10	24	45.40
23				0.745			46.11
				0.774			45.76
							−.02

No. 272.

1898							
Dec. 27		4	55	11.388	−12	41	16.40
30				11.359			16.67
				11.373			16.53
							.00
Obs. Lat. 303						37	20 26.14
Red. Lat.							26.27
							−.24

No. 280.

1899							
Jan. 23	5	4	56	32.502	−7	19	19.30
26	5			32.482			19.14
				32.492			19.22
							−.04

No. 285.

1898							
Nov. 25		4	57	0.075	−20	12	1.97
28	5½			0.061			1.36
				0.068			1.66
							+.07

No. 289.

1898							
Dec. 2	5	4	58	0.915	−26	25	11.29
15	5½			1.017			12.13
				0.966			11.71
							+.16

No. 290.

1899							
Feb. 7	5½	4	58	29.133	−22	56	22.66
8	5¾			29.117			23.23
				29.125			22.95
							+.11

No. 291.

1899							
Jan. 27	6	4	58	12.783	−39	51	53.92
28	5½			12.913			56.08
				12.848			55.00
							+.64

No. 302.

1899							
Jan. 23	6	5	1	45.979	−4	47	25.94
26	5½			45.931			25.91
				45.955			25.92
							−.06

No. 303.

1898	Mag.	h	m	s	°	′	″
Nov. 30		5	1	8.563	−22	30	29.96
Dec. 1				8.607			28.45
				8.585			29.20
							+.10
Obs. Lat. B. J.					37	20	25.09
Red. Lat.							25.31
							−.34

No. 303.

1899							
Jan. 30		5	1	11.145	−22	30	23.19
Feb. 6				11.069			23.77
				11.107			23.48
							+.10
Obs. Lat. B. J.					37	20	24.47
Red. Lat.							24.47
							−.34

No. 306.

1899							
Jan. 27	7	5	1	56.581	−5	18	0.08
28	7			56.608		17	59.13
				56.594		17	59.60
							−.06

No. 307.

1898							
Dec. 2	5½	5	1	7.717	−26	17	24.83
15	6			7.778			24.39
				7.747			24.61
							+.16

No. 308.

1898							
Nov. 25		5	0	44.321	−35	37	20.84
Dec. 9	5			44.320			20.64
				44.320			20.74
							+.41

No. 309.

1898							
Dec. 22	6	5	0	47.647	−35	50	50.90
23	6½			47.581			50.82
				47.614			50.86
							+.42

No. 310.

1898							
Dec. 27	6	5	0	38.448	−41	53	29.59
30	6			38.375			29.14
				38.411			29.36
							+1.14

No. 312.

1898							
Nov. 25		5	2	50.014	−5	13	5.97
28				.041			6.43
Dec. 9				.033			5.75
				50.029			6.05
							−.06
Obs. Lat. B. J.					37	20	25.64
Red. Lat.							25.87
							−.18

No. 312.

1899	Mag.	h	m	s	°	′	″
Feb. 9		5	2	53.034	−5	13	0.96
10				53.019			0.93
				53.026			0.94
							−.06
Obs. Lat. B. J.					37	20	25.38
Red. Lat.							25.35
							−.18

No. 316.

1898							
Nov. 30	5½	5	3	40.328	−4	35	19.08
Dec. 1	6			40.357			19.68
				40.342			19.38
							−.06

No. 322.

1899							
Feb. 7	7	5	3	38.016	−20	15	4.20
8	7			38.069			4.65
				38.042			4.42
							+.08

No. 323.

1898							
Dec. 27		5	4	15.831	−8	53	5.66
30				15.869			5.69
				15.850			5.68
1899				+2.870			+4.82
Jan. 20				18.779			0.44
							−.03
Obs. Lat. B. J.					37	20	25.53
Red. Lat.							25.65
							−.21

No. 2.

1899							
Jan. 23	7	5	5	8.416	−3	58	46.73
26	7			8.384			46.06
				8.400			46.39
							−.06

Lac. 1737.

1899							
Feb. 13	7	5	5	15.486	−41	21	3.98
14	7			15.568			5.67
				15.527			4.82
							+.97

No. 3.

1899							
Jan. 27	7	5	5	28.259	−7	42	57.19
28	7			28.233			56.97
				28.246			57.08
							−.04

No. 4.

1898							
Nov. 25		5	5	48.252	−11	46	33.63
Dec. 9	7½			48.221			33.70
				48.236			33.66
							−.01

No. 7.

1898							
Nov. 30	6	5	6	37.205	−11	58	34.64
Dec. 1	6			37.180			34.28
				37.192			34.46
							−.01

No. 11.

1899	Mag.	h	m	s	°	′	″
Feb. 7	5	5	7	35.113	−11	59	25.68
8	5			35.120			25.71
				35.116			25.69
							−.01

No. 12.

1898							
Dec. 27	7½	5	8	3.589	−8	11	10.81
30	7½			. . .			10.14
							10.48
1899				+2.886			+4.50
Jan. 20	7½			6.474			5.90
							−.04

No. 14.

1899							
Feb. 9	7½	5	6	38.052	−44	27	53.83
10	7½			37.941			54.35
				37.996			54.09
							+2.14

No. 15.

1898							
Nov. 25		5	8	39.034	−8	16	5.10
Dec. 9	6½			38.955			5.56
				38.994			5.33
							−.04

No. 16.

1899							
Jan. 23	4	5	8	23.633	−16	19	29.50
26	4			23.652			30.24
				23.642			29.87
							+.03

No. 17.

1899							
Jan. 27	5	5	8	34.009	−13	3	39.12
28	5½			33.972			39.83
				33.990			39.47
							.00

No. 18.

1898							
Dec. 2		5	9	38.035	−8	19	10.20
12				.030			10.20
15				.157			10.41
				38.074			10.27
							−.04
Obs. Lat. B. J.					37	20	25.44
Red. Lat.							25.63
							−.20

No. 18.

1899							
Feb. 13		5	9	40.969	−8	19	5.67
14				41.016			6.24
				40.992			5.95
							−.04
Obs. Lat. B. J.					37	20	25.52
Red. Lat.							25.47
							−.20

No. 24.

1898	Mag.	h	m	s	°	′	″
Nov. 30	8	5	10	11.708	−6	55	20.92
Dec. 1	7¾			11.754			21.34
				11.731			21.13
							−.05

No. 29.

1899							
Jan. 30	6¾	5	10	34.384	−27	4	42.19
Feb. 6	6½			34.310			43.21
				34.347			42.70
							+.18

No. 30.

1898							
Dec. 22	6½	5	10	9.251	−35	56	33.82
23	6¾			9.147			33.04
				9.199			33.43
							+.43

No. 33.

1898							
Dec. 27	8	5	11	59.723	−7	2	54.35
1899				+2.911			+4.16
Jan. 20	8	5	12	2.601			49.72
							−.04

No. 35.

1898							
Nov. 25		5	11	18.776	−27	3	28.41
Dec. 9	6			18.865			27.73
				18.820			28.07
							+.18

No. 36.

1899							
Feb. 7	6	5	10	54.398	−36	5	33.84
8	5½			54.583			34.41
				54.490			34.12
							+.43

No. 40.

1898							
Nov. 30		5	12	39.141	−6	57	17.48
Dec. 1				39.164			17.53
				39.152			17.50
							−.05
Obs. Lat. B. J.					37	20	26.35
Red. Lat.							26.57
							−.19

No. 40.

1899							
Jan. 27		5	12	42.073	−6	57	12.95
28				.103			12.69
Feb. 13				.069			12.70
14				.093			12.91
				42.084			12.81
							−.05
Obs. Lat. B. J.					37	20	25.50
Red. Lat.							25.50
							−.19

No. 44.

1898							
Dec. 9	7	5	12	7.224	−35	2	27.97
15	6½			7.337			27.61
				7.280			27.79
							+.39

No. 47.

1899	Mag.	h	m	s	°	′	″
Jan. 23	6	5	12	41.477	−33	38	54.14
26	6			41.516			55.01
				41.496			54.57
							+.34

No. 51.

1899							
Jan. 30	5	5	13	50.528	−34	59	39.05
Feb. 6	5			50.422			38.69
				50.475			38.87
							+.

No. 52.

1898							
Nov. 25		5	14	52.559	−13	16	55.76
Dec. 9	5			52.448			55.22
				52.503			55.49
							.00

No. 54.

1898							
Nov. 30	5	5	15	15.042	−12	25	13.76
Dec. 1	6			15.046			13.56
				15.044			13.66
							.00

No. 58.

1898							
Dec. 22	6	5	16	19.478	−0	31	3.53
23	6			19.419			3.85
				19.448			3.69
							−.08

No. 59.

1898							
Dec. 2	6	5	15	19.750	−27	28	25.85
15	6			19.804			26.28
				19.777			26.06
							+.18

No. 60.

1898							
Dec. 27	5	5	16	33.323	−0	28	59.56
30	5			33.260			59.13
				33.291			59.34
1899				+3.062			+3.77
Jan. 20				36.309			55.04
							−.08

No. 69.

1899							
Jan. 23	5½	5	16	42.388	−34	48	0.47
26	5½			42.436			1.22
				42.412			0.85
							+.38

No. 70.

1898							
Nov. 25		5	17	35.008	−24	52	20.53
Dec. 9	6½			34.999			19.58
				35.003			20.05
							+.14

No. 74.

1898							
Nov. 30	6	5	17	35.273	−34	26	42.47
Dec. 1	6½			35.249			43.73
				35.261			43.10
							+.37

No. 75.

1899	Mag.	h	m	s	°	′	″
Jan. 27	5	5	19	4.833	−7	54	3.34
28	5			4.854			2.87
				4.843			3.10
							−.04

No. 76.

1899							
Feb. 7	5	5	19	20.752	−0	59	18.53
8	5			20.730			17.64
				20.741			18.08
							−.08

No. 77.

1898							
Dec. 2	5	5	18	50.122	−14	1	22.77
15	5			50.094			23.13
				50.108			22.95
							+.01

No. 81.

1899							
Jan. 30		5	19	23.862	−2	29	24.47
Feb. 6				.925			24.19
9				.871			24.11
10				.852			23.82
				23.877			24.15
							−.07
Obs. Lat. B. J.					37	20	25.71
Red. Lat.							25.70
							−.17

No. 82.

1899							
Jan. 23	6½	5	19	35.863	−2	35	25.44
26	6½			35.886			25.36
				35.874			25.40
							−.07

No. 93.

1898							
Dec. 2	7	5	20	57.172	−13	13	15.54
15	7			57.191			14.97
				57.181			15.25
							.00

No. 94.

1898							
Nov. 25		5	20	8.030	−37	25	52.41
Dec. 9	7			8.061			52.22
				8.046			52.31
							+.49

No. 95.

1898							
Nov. 30	6	5	20	2.008	−39	46	26.09
Dec. 1	5½			2.073			24.28
				2.040			25.18
							+.64

No. 96.

1898							
Dec. 22	6½	5	21	22.140	−12	59	40.83
23	6½			22.010			40.23
				22.075			40.53
							.00

No. 97.

1898	Mag.	h	m	s	°	′	″
Dec. 27	7	5	21	51.356	−2	26	54.39
30	6½			51.284			54.45
				51.320			54.42
1899				+3.016			+3.32
Jan. 20	7			54.326			50.85
							−.07

No. 101.

1899							
Feb. 7	7½	5	22	40.451	−2	13	49.35
8	7¼			40.466			49.87
				40.458			49.61
							−.07

No. 102.

1899							
Jan. 27	6	5	22	22.430	−11	59	9.81
28	6			22.456			9.53
				22.443			9.67
							−.01

No. 104.

1898							
Nov. 25		5	22	49.147	−8	24	46.87
Dec. 9	7¾			49.118			46.38
				49.132			46.62
							−.03

No. 108.

1899							
Feb. 13	6	5	21	55.014	−44	18	57.36
15	6			55.113			60.60
				55.063			58.98
							+2.06

No. 109.

1898							
Nov. 30		5	23	49.068	−8	27	36.62
Dec. 1	6¾			49.067			36.41
				49.067			36.51
							−.03

No. 110.

1898							
Dec. 2	7½	5	24	22.716	−1	16	11.06
15	7¾			22.808			10.53
				22.762			10.79
							−.08

No. 111.

1899							
Jan. 30	7	5	24	32.781	−0	52	52.46
Feb. 6	6½			32.768			53.00
				32.774			52.73
							−.08

No. 112.

1899							
Feb. 9	5	5	24	36.250	−1	10	18.67
10	5			36.220			18.56
				36.235			18.61
							−.08

No. 113.

1899	Mag	h	m	s	°	′	″
Jan. 23		5	23	55.063	−20	50	23.72
26				55.081			23.07
				55.072			23.39
							+.08
Obs. Lat. B. J.					37	20	24.86
Red. Lat.							24.92
							−.32

No. 122.

1899							
Feb. 13	6	5	23	50.835	−41	1	52.12
14	6			50.862			53.93
				50.848			53.02
							+.89

No. 124.

1898							
Dec. 27	5½	5	24	44.396	−37	18	55.64
30	6			. . .			57.59
							56.61
1899				+2.066			+3.07
Jan. 20	5½			46.581			53.90
							+.49

No. 126.

1898							
Dec. 2		5	26	47.667	−0	22	28.79
15				47.691			28.42
				47.679			28.61
							−.08
Obs. Lat. B. J.					37	20	25.33
Red. Lat.							25.50
							−.16

No. 130.

1898							
Nov. 30	5¾	5	26	59.746	−7	22	36.99
Dec. 1	5½			59.780			37.28
				59.763			37.14
							−.04

No. 133.

1898							
Dec. 22	6	5	26	45.626	−20	56	21.02
23	5½			45.593			20.86
				45.610			20.94
							+.08

No. 134.

1899							
Jan. 23	7	5	27	57.466	−4	38	19.39
26	7			57.465			18.86
				57.465			19.12
							−.06

No. 139.

1898							
Nov. 25		5	28	13.817	−17	53	42.85
Dec. 9				13.798			43.37
				13.807			43.11
							+.05
Obs. Lat. B. J.					37	20	25.54
Red. Lat.							25.77
							−.29

No. 140.

1899	Mag.	h	m	s	°	′	″
Jan. 27	4	5	27	37.528	−35	32	41.48
28	5			37.639			40.91
				37.583			41.20
							+.41

No. 144.

1898							
Nov. 30	6¾	5	29	21.983	−4	52	26.76
Dec. 1	6½			21.999			27.40
				21.991			27.08
							−.06

No. 147.

1898							
Dec. 27		5	30	15.785	−5	27	25.27
30				15.867			24.77
				15.826			25.02
							−.05
Obs. Lat. B. J.					37	20	25.82
Red. Lat.							25.93
							−.19

No. 149.

1899							
Feb. 13	5	5	30	24.160	−4	54	16.33
14	5			24.158			16.86
				24.159			16.60
							−.06

No. 150.

1899							
Feb. 7		5	30	25.232	−5	28	56.53
8				25.308			56.84
				25.270			56.68
							−.05
Obs. Lat. B. J.					37	20	25.42
Red. Lat.							25.40
							−.19

No. 151.

1898							
Dec. 22		5	30	26.571	−5	58	36.36
23				26.594			36.57
				26.582			36.46
							−.05
Obs. Lat. B. J.					37	20	25.50
Red. Lat.							25.65
							−.19

No. 154.

1898							
Nov. 25		5	30	37.540	−4	55	21.81
Dec. 9	6			37.549			22.17
				37.544			21.99
							−.06

No. 157.

1899							
Feb. 9	6	5	28	43.959	−46	0	0.03
10	5½			43.851			1.55
				48.905			0.79
							+3.11

No. 158.

1898	Mag.	h m s	° ′ ″
Dec. 2	6	5 29 28.427	−35 12 34.87
15	5½	28.473	35.78
		28.450	35.32
			+.40

No. 159.

1899			
Jan. 30	6½	5 29 37.324	−34 22 25.93
Feb. 6	6½	37.405	25.50
		37.364	25.71
			+.37

Anon.

1898			
Nov. 30	7	5 30 54.04	−5 41 39.18
			−.05

No. 160.

1899			
Jan. 27		5 31 5.287	−1 15 59.53
28		5.250	59.60
		5.268	59.56
			−.08
Obs. Lat. B. J.			37 20 25.75
Red. Lat.			25.79
			−.16

No. 163.

1898			
Nov. 30		5 31 14.905	−5 42 . .
Dec. 1	6	15.019	46.72
		14.962	. .
1899		+2.940	+2.50
Jan. 20		17.993	43.23
			−.05

No. 167.

1898			
Dec. 2	6½	5 32 35.046	−4 59 44.61
15	6½	35.153	44.52
		35.100	44.56
			-.06

No. 169.

1899			
Jan. 23	6	5 32 13.306	−28 46 16.13
26	5½	13.303	15.94
		13.304	16.03
			+.21

No. 172.

1898			
Nov. 25		5 33 37.449	−2 39 31.80
Dec. 9		37.476	32.90
		37.462	32.35
			−.07
Obs. Lat. B. J.			37 20 26.09
Red. Lat.			26.32
			−.17

No. 173.

1899			
Feb. 13	7	5 33 41.273	−2 39 28.48
14	7¼	41.347	28.64
		41.310	28.56
			−.07

No. 174.

1899	Mag.	h m s	° ′ ″
Feb. 15	6¾	5 33 42.846	−2 39 8.11
16	6¾	42.877	9.83
		42.861	8.97
			−.07

No. 175.

1898			
Nov. 30	7	5 34 1.242	−5 15 8.15
Dec. 1	7	1.343	8.96
		1.292	8.55
			−.06

No. 176.

1898			
Dec. 27	5	5 33 56.971	−7 16 10.97
1899		+2.903	+2.27
Jan. 20	5½	59.881	8.45
			−.04

No. 177.

1899			
Jan. 30	6	5 33 17.157	−27 55 48.52
Feb. 6	6	17.113	49.39
		17.135	48.96
			+.19

No. 178.

1898			
Dec. 2	5½	5 34 26.173	−3 37 18.18
15	6	26.179	18.31
		26.176	18.25
			−.07

No. 181.

1899			
Feb. 9	6¾	5 33 42.395	−28 41 9.08
10	6¾	42.400	8.37
		42.397	8.73
			+.21

No. 183.

1899			
Feb. 7	5½	5 33 48.078	−28 45 1.33
8	5½	48.035	1.24
		48.056	1.28
			+.21

No. 185.

1899			
Jan. 27	7	5 35 17.474	−3 28 52.70
28	6¾	17.452	52.82
		17.463	52.76
			−.07

No. 188.

1898			
Nov. 25		5 35 36.656	−1 59 47.50
Dec. 9	3	36.628	48.63
		36.642	48.06
			−.08

No. 190.

1898			
Dec. 22	8	5 34 34.708	−28 53 43.93
23	7¾	34.638	43.51
		34.673	43.72
			+.21

No. 193.

1898	Mag.	h m s	° ′ ″
Nov. 30	8	5 35 18.945	−29 46 3.39
Dec. 1	8	19.249	4.05
		19.097	46 3.72
1900		+4.625	+4.30
Feb. 16		23.698	45 58.67
			+.23

No. 195.

1899			
Feb. 15	6	5 35 28.874	−40 45 52.59
16	6	28.849	49.04
		28.861	50.81
			+.82

No. 196.

1899			
Jan. 30	3	5 35 59.514	−34 7 41.39
Feb. 6	3	59.483	41.46
		59.498	41.42
			+.36

No. 197.

1899			
Jan. 23	5½	5 36 5.664	−32 40 56.81
26	5½	5.688	57.43
		5.676	57.12
			+.31

No. 200.

1898			
Nov. 25		5 37 59.625	−1 39 37.41
Dec. 9	6¾	59.660	38.03
		59.642	37.72
			−.08

No. 204.

1898			
Dec. 27	5¾	5 37 56.484	−22 25 24.13
1899		+2.524	+1.92
Jan. 20	6	59.016	22.40
			+.10

No. 205.

1898			
Dec. 2	6¼	5 37 43.004	−33 27 3.54
15	6¼	43.059	3.16
		43.031	3.35
			+.33

No. 207.

1898			
Nov. 30	6	5 38 18.313	−30 35 4.50
Dec. 1	6¼	18.319	6.29
		18.316	5.40
			+.25

No. 211.

1898			
Dec. 22	5	5 38 35.760	−34 43 4.55
23	5	35.727	3 34
		35.743	3.94
			+.38

No. 217.

1899			
Jan. 27	6½	5 39 33.013	−33 28 15.97
28	6½	33.019	14.17
		33.016	15.07
			+.33

No. 219.

1898	Mag.	h m s	° ′ ″
Dec. 2		5 40 12.657	− 22 28 54.47
15		12.629	55.38
		12.643	54.92
			+.10
Obs. Lat. B. J.			37 20 25.60
Red. Lat.			25.80
			−.34

No. 219.

1899			
Jan. 30		5 40 15.154	− 22 28 53.05
Feb. 6		.196	53.03
13		.149	53.67
14		.111	52.74
15		.129	52.71
16		.134	53.14
20		.184	53.16
		15.151	53.07
			+.10
Obs. Lat. B. J.			37 20 25.73
Red. Lat.			25.69
			−.34

No. 224.

1899			
Jan. 23	6½	5 40 10.083	− 39 27 5.91
26	6	9.990	8.56
		10.036	7.23
			+.61

No. 230.

1898		
Nov. 30	5 42 19.992	− 14 51 35.52
Dec. 1	19.992	36.07
	19.992	35.79
		+.02
Obs. Lat. B. J.		37 20 25.30
Red. Lat.		25.52
		−.26

No. 230.

1899		
Feb. 9	5 42 22.711	− 14 51 34.29
10	22.744	34.07
	22.727	34.18
		+.02
Obs. Lat. B. J.		37 20 25.26
Red. Lat.		25.23
		−.26

No. 231.

1899			
Feb. 7	7	5 40 49.127	− 45 52 47.95
8	6½	49.196	48.84
		49.161	48.39
			+3.02

No. 234.

1898		
Dec. 22	5 42 55.149	− 9 42 21.64
23	55.143	21.65
	55.146	21.64
		−.03
Obs. Lat. B. J.		37 20 26.12
Red. Lat.		26.27
		−.21

No. 238.

1898	Mag.	h m s	° ′ ″
Nov. 25		5 42 12.387	− 32 20 43.08
Dec. 9	6	12.419	43.56
		12.403	43.32
			+.30

No. 241.

1898			
Dec. 27	6	5 43 17.978	− 27 10 13.40
1899		+2.389	+1.46
Jan. 20	6¾	20.385	12.14
			+.18

No. 250.

1899			
Jan. 23	6	5 44 18.902	− 41 37 29.44
26	6	18.775	32.81
		18.838	31.12
			+1.05

No. 252.

1898		
Nov. 25	5 45 37.873	− 23 0 9.85
Dec. 9	6¼ 37.933	10.75
	37.903	10.30
		+.11

No. 254.

1898		
Nov. 30	6 5 46 26.488	− 7 32 43.20
Dec. 1	5½ 26.535	43.98
	26.511	43.59
		−.04

No. 261.

1898		
Dec. 27	5 46 56.086	− 20 53 15.47
1899	+2.562	+1.14
Jan. 20	58.696	15.40
		+.08
Obs. Lat. B. J.		37 20 24.77
Red. Lat.		24.87
		−.32

No. 261.

1899		
Feb. 7	5 46 58.726	− 20 53 15.45
8	.631	15.23
9	.737	15.48
10	.700	15.92
	58.698	15.52
		+.08
Obs. Lat. B. J.		37 20 25.20
Red. Lat.		25.18
		−.32

No. 263.

1898		
Nov. 25	5 47 15.188	− 20 51 45.42
Dec. 9	8½ 15.143	45.34
	15.166	44.38
		+.08

No. 267.

1898		
Dec. 2	4 5 47 21.920	− 35 48 24.12
15	3 21.860	24.84
	21.890	24.48
		+.42

No. 270.

1898	Mag.	h m s	° ′ ″
Dec. 22	7	5 48 21.548	− 35 56 4.47
23	7	21.457	3 92
		21.502	4.20
			+.43

No. 274.

1898			
Nov. 30	5½	5 49 4.514	− 37 39 11.81
Dec. 1	6	4.570	12.30
		4.542	12.05
			+.50

No. 276.

1899			
Jan. 27	5	5 49 26.871	− 33 49 26.49
28	5	26.890	26.13
		26.881	26.31
			+.35

No. 278.

1899			
Jan. 30	6	5 49 24.849	− 38 32 52.53
Feb. 6	6½	24.766	53.81
		24.807	53.17
			+.55

No. 281.

1898		
Nov. 25	5 51 45.535	− 14 11 9.95
Dec. 9	45.604	10.68
	45.569	10.31
		+.01
Obs. Lat. B. J.		37 20 25.25
Red. Lat.		25.48
		−.25

No. 281.

1899		
Jan. 23	5 51 48.249	− 14 11 10.39
26	48.281	10.41
	48.265	10.40
		+.01
Obs. Lat. B. J.		37 20 25.90
Red. Lat.		25.95
		−.25

No. 286.

1898		
Dec. 2	6 5 51 33.374	− 39 58 33.19
15	5 33.395	31.19
	33.384	32.19
		+.65

No. 288.

1898		
Dec. 22	6 5 52 9.164	− 31 32 49.73
23	6½ 9.108	49.52
	9.136	49.62
		+.28

No. 290.

1898		
Nov. 30	6 5 51 59.306	− 37 8 9.15
Dec. 1	5 59.281	9.98
	59.293	9.56
		+.48

No. 292.

1899	Mag.	h	m	s	°	′	″
Jan. 27		5	52	32.885	−31	23	47.34
28	5¾			32.949			47.96
				32.917			47.65
							+.27

No. 294.

1898							
Nov. 25		5	54	10.028	−9	23	26.89
Dec. 9	6			10.023			28.04
				10.026			27.46
							−.03

No. 295.

1898							
Nov. 30	5¾	5	54	13.755	−9	33	54.55
Dec. 1	5½			13.741			55.35
				13.748			54.95
							−.03

No. 297.

1898							
Dec. 2	5	5	53	55.204	−35	17	39.38
15	4			55.291			39.12
				55.247			39.25
							+.40

No. 311.

1898							
Nov. 25		5	57	2.514	−10	35	57.63
Dec. 9	5½			2.467			57.46
				2.490			57.55
							−.02

No. 312.

1898							
Nov. 30	7	5	57	14.715	−7	17	24.74
Dec. 1	7			14.746			25.20
				14.730			24.97
							−.04

No. 313.

1899							
Jan. 23	6	5	55	37.826	−44	2	35.13
26	5½			.814			32.34
Feb. 9	5¾			.885			35.93
				37.842			34.47
							+1.94

No. 315.

1898							
Dec. 22	4	5	56	1.532	−42	49	17.11
23	4			1.469			16.51
				1.500			16.81
							+1.43

No. 320.

1899							
Jan. 30	5	5	57	36.714	−33	54	45.73
Feb. 6	5½			36.625			46.28
				36.670			46.00
							+.35

No. 327.

1898							
Nov. 25		5	59	8.928	−26	17	2.13
Dec. 9	5½			8.908			3.31
				8.918			2.72
							+.16

No. 330.

1899	Mag.	h	m	s	°	′	″
Jan. 27	6	6	0	40.923	−10	14	9.70
28	6			40.856			9.34
				40.890			9.52
							−.02

No. 331.

1898							
Dec. 15	5	6	0	26.004	−16	28	39.18
16	5½			26.026			38.87
				26.015			39.02
							+.03

No. 336.

1898							
Dec. 27	4	6	1	32.324	−14	55	33.30
1899				+2.716			−0.14
Jan. 20	4½			34.964			34.06
							+.02

No. 339.

1899							
Jan. 23	6	6	2	8.156	−11	9	45.70
26	6			8.179			44.37
				8.167			45.03
							−.01

No. 342.

1898							
Dec. 22	5½	6	2	16.884	−23	5	57.43
23	5½			16.833			57.18
				16.858			57.30
							+.11

No. 345.

1899							
Feb. 15	7	6	2	38.634	−23	5	53.21
16	7			38.625			52.80
				38.630			53.01
							+.11

No. 346.

1899							
Feb. 9	6	6	1	34.051	−45	2	13.27
10	6			34.007			13.37
				34.029			13.32
							+2.46

No. 347.

1899							
Feb. 13	7	6	1	35.822	−45	11	19.41
20	7			36.027			[29.31]
				35.924			
1900				+1.727			−0.14
Feb. 16				37.675			20.30
							+2.55

No. 348.

1899							
Feb. 21	6	6	1	45.957	−45	4	44.68
22				45.764			45.72
				45.860			45.20
							+2.47

No. 349.

1898							
Dec. 15	5½	6	3	15.442	−19	9	14.46
16	6			15.367			13.54
				15.404			14.00
							+.06

No. 352.

1899	Mag.	h	m	s	°	′	″
Jan. 30	5½	6	3	25.434	−34	17	57.10
Feb. 6	6			25.345			58.28
				25.390			57.69
							+.36

No. 4.

1899							
Jan. 27	7½	6	3	48.604	−37	1	22.24
28	7½			.612			22.47
Feb. 24	6			.565			22.33
				48.594			22.35
							+.47

No. 5.

1899							
Mar. 3	7	6	3	51.218	−37	11	13.70
4	7			51.101			10.99
				51.160			12.34
							+.48

No. 6.

1899							
Feb. 9	6	6	3	33.750	−42	17	12.92
10	6			33.737			12.14
				33.743			12.53
							+1.26

No. 9.

1899							
Feb. 7	5	6	4	3.905	−37	14	21.24
8	5			3.852			21.88
				3.878			21.56
							+.49

No. 11.

1899							
Feb. 13	6	6	4	6.025	−45	4	48.04
20	6			6.154			[53.69]
				6.090			
1900				+1.732			−0.36
Feb. 16				7.940			45.86
							+2.49

No. 12.

1899							
Feb. 15	5	6	4	44.571	−42	8	20.47
16	5½			44.629			19.35
				44.600			19.91
							+1.22

No. 15.

1899							
Feb. 21	6½	6	4	50.388	−44	42	57.39
Mar. 3	7			50.371			61.49
				50.380			59.44
							+2.28

No. 17.

1898							
Dec. 27	5½	6	6	31.185	−27	7	53.62
1899				+2.338			−0.57
Jan. 20	5½			33.497			55.15
							+.18

No. 20.

1899							
Jan. 23		6	5	36.186	−44	20	23.39
26	6			36.220			24.62
				36.203			24.01
							+2.08

No. 26.

1899	Mag.	h	m	s	°	′	″
Feb. 7	7	6	7	26.478	−27	2	5.01
8	7			26.391			4.98
				26.434			4.99
							+.18

No. 28.

1899							
Jan. 30	5½	6	6	54.784	−40	20	8.11
Feb. 6	5½			54.737			10.06
				54.760			9.08
							+.72

No. 34.

1899							
Feb. 21	6	6	7	45.791	−45	15	37.75
22				45.600			36.60
				45.696			37.17
							+2.60

No. 35.

1898							
Dec. 15		6	9	52.797	−6	14	36.75
16				52.797			36.52
				52.797			36.63
							−.05
Obs. Lat. 303					37	20	25.60
Red. Lat.							25.77
							−.19

No. 35.

1899							
Jan. 23		6	9	55.683	−6	14	37.95
26				55.744			37.39
				55.713			37.67
							−.05
Obs. Lat. 303					37	20	25.67
Red. Lat.							25.72
							−.19

No. 36.

1899							
Feb. 15	6½	6	9	1.844	−28	26	15.08
16	6½			1.803			14.40
				1.823			14.74
							+.20

No. 44.

1898							
Dec. 27	7	6	10	47.763	−6	10	31.61
1899				+2.928			−0.95
Jan. 20	7½			50.640			33.40
							−.05

No. 46.

1899							
Jan. 27	8½	6	11	5.835	−12	41	29.75
28	8½			5.881			29.69
				5.858			29.72
							.00

No. 47.

1898							
Dec. 22	8	6	11	24.996	−6	9	6.46
23	8			24.898			6.43
				24.947			6.44
							−.05

No. 48.

1899	Mag.	h	m	s	°	′	″
Feb. 21	8	6	11	12.998	−12	42	19.13
22				13.018			. .
Mar. 3	8			13.043			18.78
				13.020			18.95
							.00

No. 56.

1899							
Jan. 30		6	12	50.253	−10	41	15.82
Feb. 6				.202			16.01
24				.228			15.86
Mar. 3				.270			16.04
4				.199			15.88
				50.230			15.92
							−.02
Obs. Lat. 303					37	20	25.47
Red. Lat.							25.42
							−.22

No. 59.

1898							
Dec. 15	6	6	12	46.145	−22	40	16.29
16	6¼			46.030			15.47
				46.087			15.88
							+.11

No. 60.

1899							
Feb. 7	6½	6	12	52.949	−22	20	13.70
8	6½			52.906			14.05
				52.927			13.87
							+.10

No. 65.

1899							
Feb. 9	4	6	12	57.501	−35	6	25.21
10	4			57.474			25.52
				57.487			25.36
							+.39

No. 68.

1899							
Feb. 13	6	6	13	15.325	−39	13	40.14
20	5¾			15.428			40.68
				15.376			40.41
							+.60

No. 69.

1898							
Dec. 27	5½	6	14	48.009	−7	46	47.85
1899				+2.890			−1.30
Jan. 20	6			50.882			49.73
							−.04

No. 70.

1899							
Feb. 15	5	6	13	35.035	−37	42	10.61
16	5			35.000			6.87
				35.017			8.74
							+.46

No. 71.

1899							
Jan. 23		6	13	41.615	−37	12	54.69
26	5½			41.701			55.45
				41.658			55.07
							+.44

No. 72.

1898							
Dec. 15	8	6	14	57.660	−13	30	44.23
16	8¼			57.743			44.44
				57.701			44.34
							+.01

No. 73.

1898	Mag.	h	m	s	°	′	″
Dec. 22	6¾	6	15	12.152	−7	49	39.65
23	7			12.119			39.52
				12.136			39.58
							−.04

No. 76.

1899							
Feb. 13	8½	6	16	55.640	−1	58	53.13
20	8½			55.632			52.86
				55.636			53.00
							−.08

No. 79.

1899							
Jan. 27	5½	6	16	2.602	−34	21	11.31
28	6			2.647			10.45
				2.624			10.88
							+.36

No. 80.

1899							
Jan. 30	7¼	6	16	20.969	−29	58	25.87
Feb. 6	7¼			20.870			26.30
				20.920			26.08
							+.24

No. 81.

1899							
Feb. 7	3	6	16	26.180	−30	1	7.22
8	3			26.159			6.56
				26.170			6.89
							+.24

No. 86.

1899							
Feb. 9	7	6	16	28.276	−39	26	33.10
10	6¾			28.275			33.30
				28.276			33.20
							+.61

No. 88.

1899							
Jan. 23		6	16	56.988	−34	5	56.03
26	5½			56.967			56.88
				56.977			56.45
							+.36

No. 92.

1898							
Dec. 27		6	18	12.482	−17	54	18.69
1899				+2.641			−1.59
Jan. 20				15.006			20.91
							+.05
Obs. Lat. B. J.					37	20	25.44
Red. Lat.							25.54
							−.29

No. 92.

1899							
Feb. 15		6	18	15.074	−17	54	21.23
16				.089			20.47
21				.082			20.59
22				.087			20.61
24				.041			20.91
Mar. 3				.128			21.23
4				.043			21.22
				15.078			20.89
							+.05
Obs. Lat. B. J.					37	20	26.01
Red. Lat.							25.93
							−.29

No. 95.

1898	Mag.	h	m	s	°	′	″
Dec. 15	4	6	18	23.112	−33	23	6.38
16	4			23.130			4.42
				23.121			5.40
							+.33

No. 97.

1898							
Dec. 22	7½	6	18	48.126	−33	49	8.75
23	7½			48.128			6.87
				48.127			7.81
							+.35

No. 108.

1899							
Jan. 27	5½	6	22	5.730	−0	12	55.96
28	5½			5.784			54.67
				5.757			55.31
							−.09

No. 110.

1899							
Jan. 23		6	20	30.873	−36	39	17.69
26	5½			30.786			17.55
				30.830			17.62
							+.46

No. 111.

1899							
Feb. 21	6½	6	22	0.688	−4	17	43.16
22	6			0.715			43.11
				0.701			43.13
							−.06

No. 112.

1899							
Jan. 30	7	6	20	36.003	−36	38	54.27
Feb. 6	7			36.000			54.31
				36.001			54.29
							+.46

No. 116.

1898							
Dec. 22		6	22	55.327	−4	41	56.86
23				55.279			56.33
				55.303			56.59
							−.06
Obs. Lat. B. J.					37	20	25.59
Red. Lat.							25.74
							−.18

No. 117.

1898							
Dec. 15	6	6	21	25.955	−40	13	36.63
1899				+1.947			−1.87
Feb. 24	6			27.784			39.00
							+.69

No. 118.

1899							
Feb. 7	6	6	23	37.970	−0	30	29.75
8	6			37.961			28.94
				37.966			29.35
							−.08

No. 121.

1899							
Feb. 21	5	6	23	55.169	−6	58	6.44
22	6			55.114			6.33
				55.141			6.38
							−.05

No. 122.

1898	Mag.	h	m	s	°	′	″
Dec. 15	6	6	23	52.761	−6	58	8.84
16	7 & 7			52.662			8.74
Dup. mean.				52.711			8.79
							−.05

No. 124.

1899							
Feb. 9	6½	6	22	32.542	−40	54	58.64
10	6¾			32.462			59.74
				32.502			59.19
							+.86

No. 127.

1899							
Feb. 15	6½	6	23	19.981	−32	6	10.38
16	6½			19.918			9.08
				19.950			9.73
							+.29

No. 128.

1899							
Feb. 13	7½	6	22	58.410	−41	34	37.85
20	8			58.521			40.62
				58.466			39.23
							+1.04

No. 136.

1899							
Jan. 23		6	24	25.529	−32	30	59.51
26	5			25.484			59.95
				25.506			59.73
							+.31

No. 138.

1899							
Jan. 30	5¾	6	24	53.766	−32	18	22.42
Feb. 6	6			53.802			22.92
				53.784			22.67
							+.30

No. 139.

1899							
Feb. 9	7	6	24	34.425	−41	4	14.22
10	7			34.511			15.51
				34.468			14.86
							+.90

No.145.

1899							
Jan. 27	6	6	25	28.463	−41	0	34.21
28	6			28.474			36.40
				28.468			35.30
							+.88

No. 148.

1898							
Dec. 16		6	26	44.040	−27	41	54.68
1899				+2.375			−2.34
Feb. 24	5½			46.388			58.42
							+.19

No. 151.

1898							
Dec. 22	6	6	27	26.260	−17	59	21.42
23	6			26.185			21.35
				26.222			21.38
							+.05

No. 154.

1899	Mag.	h	m	s	°	′	″
Jan. 30	6	6	28	2.931	−11	5	31.63
Feb. 6	6			2.879			31.80
				2.905			31.71
							−.01

No. 155.

1898							
Dec. 27	5	6	27	36.371	−23	20	43.43
1899				+2.499			−2.41
Jan. 20	5			38.878			45.33
							+.12

No. 159.

1899							
Feb. 7	6	6	27	45.418	−40	50	43.05
8	6			45.523			42.85
				45.470			42.95
							+.84

No. 160.

1899							
Feb. 13	6	6	28	5.077	−36	52	8.90
20	5½			5.128			8.93
				5.102			8.91
							+.47

No. 164.

1898							
Dec. 15	6½	6	28	49.952	−31	57	17.23
16				49.877			16.25
				49.914			16.74
							+.29

No. 166.

1899							
Jan. 27	5½	6	28	53.615	−37	37	12.00
28	5½			53.750			13.37
				53.682			12.68
							+.50

No. 170.

1899							
Feb. 7		6	30	49.392	−22	53	5.88
8				49.387			5.24
				49.390			5.56
							+.11
Obs. Lat. B. J.					37	20	25.37
Red. Lat.							25.36
							−.35

No. 171.

1898							
Dec. 22	6	6	31	34.023	−5	7	35.51
23	5½			34.018			34.99
				34.020			35.25
							−.06

No. 172.

1899							
Feb. 9	5	6	30	16.961	−36	9	23.53
10	5			17.155			23.24
				17.058			23.39
							+.43

No. 175.

1899							
Feb. 15	5½	6	30	50.629	−32	38	12.46
16	5¾			50.622			10.43
				50.626			11.45
							+.31

No. 177.

1898	Mag.	h m s	° ′ ″
Dec. 27	6	6 31 0.817	− 33 55 45.04
1899		+ 2.182	− 2.71
Jan. 20	6½	3.066	48.81
			+ .35

No. 178.

1899			
Feb. 24	8	6 31 56.239	− 18 34 40.57
Mar. 3	8	.238	. .
4		.290	39.63
		56.256	40.10
			+ .05

No. 179.

1898			
Dec. 15	6	6 31 54.887	− 18 34 34.54
16		54.871	33.82
		54.879	34.18
1899		+ 2.628	− 2.79
Mar. 3	6	57.417	37.64
			+ .05

No. 180.

1899			
Jan. 30	5	6 32 16.703	− 19 10 11.66
Feb. 6	4	16.657	11.32
		16.680	11.49
			+ .06

No. 182.

1899			
Jan. 27	6	6 31 53.565	− 36 41 55.28
28	6	53.599	55.40
		53.582	55.34
			+ .46

No. 187.

1899			
Feb. 13	6½	6 32 40.676	− 31 48 11.72
20	6	40.712	11.19
		40.694	11.46
			+ .28

No. 189.

1899			
Jan. 23	5½	6 33 26.868	− 18 9 0.14
26	4½	.845	8 59.79
Feb. 24	5	.854	9 1.11
		26.856	9 0.35
			+ .05

No. 191.

1899			
Feb. 9	7½	6 33 14.743	− 32 8 17.31
10	7¼	14.750	17.08
		14.746	17.14
			+ .29

No. 195.

1899			
Feb. 15	5½	6 33 36.036	− 38 3 43.45
16	6	36.048	41.27
		36.042	42.36
			+ .53

No. 196.

1898			
Dec. 27	6½	6 34 34.228	− 18 5 42.54
1899		+ 2.641	− 3.02
Jan. 20	6½	36.812	45.56
			+ .05

No. 197.

1898	Mag.	h m s	° ′ ″
Dec. 15	5¾	6 33 41.809	− 36 54 12.77
16		41.789	11.32
		41.799	12.04
			+ .47

No. 198.

1899			
Feb. 7	5½	6 34 0.643	− 32 15 14.57
8	5½	0.696	14.94
		0.670	14.75
			+ .30

No. 199.

1899			
Feb. 21	6	6 33 39.012	− 41 28 19.87
22		39.011	19.37
		39.011	19.62
			+ 1.01

No. 205.

1899			
Feb. 13	3	6 34 40.257	− 43 6 29.19
20	3	40.285	30.35
		40.271	29.77
			+ 1.54

No. 206.

1898			
Dec. 22	7	6 35 11.039	− 37 54 16.27
23	7	10.922	15.09
		10.980	15.68
			+ .52

No. 213.

1898			
Dec. 15	6¼	6 36 28.478	− 38 3 50.15
16		28.374	49.94
		28.426	50.04
			+ .53

No. 214.

1899			
Jan. 23	7	6 37 16.366	− 30 33 0.04
26	7	.199	2.81
Feb. 7	6½	.201	1.76
		16.255	1.54
			+ .25

No. 216.

1899			
Jan. 27	6½	6 37 44.508	− 27 32 13.58
28	6½	44.596	13.58
		44.552	13.58
			+ .19

No. 219.

1899			
Jan. 30	6½	6 37 56.674	− 40 15 13.93
Feb. 6	6½	56.710	16.02
		56.692	14.97
			+ .70

No. 223.

1898			
Dec. 27	6½	6 38 49.257	− 38 17 57.99
1899		+ 2.033	− 3.38
Jan. 20	7	51.335	18 1.78
			+ .54

No. 225.

1898	Mag.	h m s	° ′ ″
Dec. 15	7¾	6 40 5.816	− 16 37 28.10
16		5.703	28.10
		5.760	28.10
			+ .04

No. 227.

1899			
Jan. 27		6 40 41.876	− 16 34 38.44
28		41.901	37.49
		41.888	37.96
			+ .03
Obs. Lat. B. J.			37 20 24.79
Red. Lat.			24.82
			− .27

No. 230.

1898			
Dec. 22	6½	6 39 59.059	− 39 5 25.56
23	6	59.031	22.61
		59.045	24.08
			+ .59

No. 231.

1899			
Feb. 15	5½	6 40 37.878	− 30 57 59.28
16	5½	.832	58 0.80
Mar. 3	6	.918	1.49
		37.876	58 0.52
			+ .26

No. 233.

1899			
Jan. 23	7	6 41 37.323	− 20 40 5.92
26	6½	37.157	4.93
		37.240	5.42
			+ .08

No. 235.

1899			
Jan. 30	7	6 41 44.199	− 20 29 59.05
Feb. 6	7	44.113	60.21
		44.156	59.63
			+ .08

No. 236.

1899			
Feb. 21	6½	6 41 46.926	− 20 38 49.50
22	6½	46.945	49.65
		46.936	49.57
			+ .08

No. 237.

1899			
Feb. 9	5	6 42 14.708	− 14 19 2.79
10	5	14.683	3.72
		14.696	3.25
			+ .01

No. 238.

1899			
Feb. 7	6	6 41 40.167	− 30 50 34.26
8	6	40.225	34.81
		40.196	34.53
			+ .26

No. 239.

1899			
Feb. 13	5½	6 41 36.141	− 31 40 44.50
20	5½	36.199	43.20
		36.170	43.85
			+ .28

No. 241.

1898	Mag.	h m s	° ′ ″
Dec. 15	6½	6 42 39.368	−20 54 18.34
16		39.354	18.21
		39.361	18.27
			+.08

No. 242.

1899			
Feb. 15	7¼	6 42 46.331	−20 59 32.44
16	7¼	46.342	31.77
		46.336	32.11
			+.08

No. 245.

1898			
Dec. 27	5¾	6 42 42.299	−37 39 58.54
1899		+2.059	−3.72
Jan. 20	6¼	44.308	40 3.78
			+.51

No. 249.

1898			
Dec. 22	7	6 44 12.351	−14 16 29.98
23	7	12.372	29.56
		12.361	29.77
			+.01

No. 253.

1899			
Jan. 27	5½	6 43 53.982	−37 49 6.36
28		54.079	7.42
		54.030	6.89
			+.51

No. 258.

1898			
Dec. 15	6¾	6 45 43.335	−32 25 28.90
16		43.351	29.38
		43.343	29.14
			+.30

No. 259.

1899			
Jan. 30	4	6 46 4.168	−32 23 31.18
Feb. 6	3	4.109	32.31
		4.138	31.74
			+.30

No. 260.

1898			
Dec. 27	6½	6 46 40.647	−18 53 36.23
1899		+2.624	−4.06
Jan. 20	6½	43.254	40.36
			+.06

No. 261.

1899			
Jan. 23	6	6 46 34.319	−31 35 19.26
26	5½	34.322	18.82
		34.320	19.04
			+.28

No. 262.

1899			
Feb. 7	7¾	6 46 37.357	−31 35 1.80
8	7¾	37.449	1.54
		37.403	1.67
			+.28

No. 267.

1899	Mag.	h m s	° ′ ″
Jan. 27	5	6 47 11.991	−34 14 53.35
28	5	12.063	54.68
		12.027	54.01
			+.36

No. 268.

1899			
Feb. 9	7	6 47 24.962	−34 9 25.83
10	7	25.044	26.10
		25.003	25.96
			+.36

No. 271.

1898			
Dec. 15	6	6 48 6.639	−36 6 22.11
16		6.667	20.36
		6.653	21.24
			+.43

No. 272.

1898			
Dec. 22	7½	6 49 0.368	−18 19 12.63
23	7½	0.338	11.72
		0.353	12.17
			+.05

No. 274.

1899			
Jan. 30		6 49 29.801	−11 54 43.72
Feb. 6		.823	43.42
21		.776	43.49
22		.820	43.20
		29.805	43.46
			−.01
Obs. Lat. B. J.			37 20 25.83
Red. Lat.			25.79
			−.23

No. 275.

1899			
Feb. 15	5½	6 49 10.822	−20 5 57.84
16	5½	10.896	57.70
		10.859	57.77
			+.07

No. 277.

1899			
Feb. 7	7½	6 49 38.475	−24 6 16.88
8	7	38.542	17.34
		38.508	17.11
			+.13

No. 278.

1899			
Feb. 13	5½	6 49 32.791	−28 24 7.49
20	5½	32.766	7.69
		32.778	7.59
			+.20

No. 279.

1899			
Jan. 23	4	6 49 56.483	−24 3 28.09
26	4	56.388	28.25
		56.436	28.17
			+.13

No. 282.

1898			
Dec. 27	6	6 50 38.475	−20 16 30.03
1899		+2.591	−4.40
Jan. 20	6	41.110	33.86
			+.08

No. 286.

1899	Mag.	h m s	° ′ ″
Jan. 27	5	6 51 28.958	−13 54 46.17
28	5	28.958	45.58
		28.958	45.87
			+.01

No. 287.

1898			
Dec. 15		6 51 12.075	−20 0 23.18
16		12.122	23.16
		12.098	23.17
			+.07
Obs. Lat. 303			37 20 25.91
Red. Lat.			26.08
			−.31

No. 289.

1899			
Feb. 9	5	6 51 37.931	−16 55 24.22
10	5	37.975	23.43
		37.953	23.83
			+.04

No. 290.

1899			
Feb. 13		6 52 32.869	−16 57 . .
20	5½	.829	54.06
21	6½	.846	53.74
		32.848	53.90
			+.04

No. 291.

1899			
Feb. 15	5	6 51 15.914	−42 14 18.07
16	6	.829	16.37
24	6	.847	18.80
		15.863	17.75
			+1.25

Anon.

1899			
Feb. 13	7½	6 52 55.768	−16 57 39.13
			+.04

No. 300.

1898			
Dec. 22	5½	6 53 21.331	−24 29 51.69
23	6	21.352	51.45
		21.341	51.57
			+.13

No. 303.

1898			
Dec. 27		6 54 25.058	−25 16 33.44
1899		+2.459	−4.72
Jan. 20		27.572	37.37
			+.15
Obs. Lat. 303			37 20 26.67
Red. Lat.			26.77
			−.39

No. 303.

1899			
Feb. 7		6 54 27.522	−25 16 38.07
8		.555	37.49
9		.547	36.97
10		.583	38.03
		27.552	37.64
			+.15
Obs. Lat. 303			37 20 26.37
Red. Lat.			26.34
			−.39

No. 304.

1899	Mag.	h m s	° ′ ″
Jan. 23		6 54 39.369	−28 50 5.18
26		.370	5.18
Feb. 15		.392	4.28
16		.335	4.46
24		.324	4.42
Mar. 3		.301	5.85
		39.348	4.89
			+.21
Obs. Lat. B. J.			37 20 25.54
Red. Lat.			25.50
			−.45

No. 306.

1898			
Dec. 15	5½	6 54 41.023	−33 58 23.71
16		41.060	23.21
		41.041	23.46
			+.35

No. 307.

1899			
Jan. 27	7	6 55 6.628	−28 49 25.89
28	7	6.703	24.99
		6.666	25.44
			+.21

No. 314.

1899			
Jan. 30	6	6 55 45.582	−45 37 44.76
Feb. 6	6½	45.619	49.08
		45.600	46.92
			+2.84

No. 315.

1898			
Dec. 22		6 57 50.853	−4 5 28.85
23		.944	28.41
27		.979	28.68
		50.925	28.65
			−.06
Obs. Lat. 303			37 20 25.78
Red. Lat.			25.92
			−.18

No. 315.

1899			
Feb. 13		6 57 53.928	−4 5 33.19
20		.946	33.46
21		.886	33.40
22		.897	33.06
		53.914	33.28
			−.06
Obs. Lat. 303			37 20 25.84
Red. Lat.			25.78
			−.18

No. 318.

1898			
Dec. 15	7	6 58 18.868	−2 52 33.48
16		18.841	33.84
		18.854	33.66
			−.07

No. 319.

1899	Mag.	h m s	° ′ ″
Jan. 20	7	6 58 25.965	−4 7 5.73
Feb. 24	6¾	25.947	5.76
		25.956	5.74
			−.06

No. 320.

1899			
Jan. 23	4	6 57 41.759	−27 47 25.28
26	3	41.689	23.87
		41.724	24.57
			+.19

No. 323.

1899			
Feb. 7	4	6 58 48.459	−23 41 9.02
8	4	48.482	8.84
		48.470	8.93
			+.12

No. 325.

1899			
Jan. 27		6 59 11.344	−15 29 2.45
28		11.327	2.56
		11.336	2.50
			+.02
Obs. Lat. B. J.			37 20 25.27
Red. Lat.			25.30
			−.26

No. 327.

1899			
Jan. 30	6	6 59 8.071	−43 15 23.46
Feb. 6	6½	8.057	28.78
		8.064	26.12
			+1.60

No. 328.

1898			
Dec. 15	7¼	7 0 54.242	−14 43 0.87
16		54.302	1.27
		54.272	1.07
			+.02

No. 335.

1899			
Jan. 23	6	7 0 50.706	−42 11 18.19
26	5½	50.623	20.93
		50.664	19.56
			+1.23

No. 336.

1899			
Feb. 9	5½	7 0 51.505	−43 28 6.64
10	5½	51.488	8.19
		51.496	7.41
			+1.69

No. 337.

1899			
Feb. 15	7	7 0 53.029	−43 28 17.73
16	7½	52.962	14.87
		52.996	16.30
			+1.69

No. 344.

1898			
Dec. 22	7	7 2 43.382	−42 10 19.19
23	7	43.310	17.05
		43.346	18.12
			+1.22

No. 2.

1898	Mag.	h m s	° ′ ″
Dec. 27	7	4 14.726	−26 13 53.51
1899		+2.439	−5.55
Jan. 20		17.039	59.25
			+.16
Obs. Lat. B. J.			37 20 26.13
Red. Lat.			26.23
			−.40

No. 2.

1899			
Feb. 15	7	4 17.066	−26 13 58.28
16		.095	58.05
24		.052	58.06
Mar. 3		.036	58.49
		17.062	58.22
			+.16
Obs. Lat. B. J.			37 20 25.52
Red. Lat.			25.44
			−.40

No. 4.

1899			
Jan. 27	7	5 12.670	−4 4 45.58
28		.719	45.66
Feb. 9		.678	45.94
10		.661	45.53
13		.693	45.60
20		.652	45.62
		12.679	45.66
			−.06
Obs. Lat. 303			37 20 25.77
Red. Lat.			25.75
			−.18

No. 6.

1898			
Dec. 15	6	7 3 46.715	−40 44 1.46
1899		+1.966	−5.52
Feb. 21	5½	48.645	8.54
			+.82

No. 13.

1899			
Jan. 23	5½	7 5 33.312	−25 4 4.35
26	6	33.264	4.82
		33.288	4.58
			+.14

No. 14.

1899			
Feb. 7	7¾	7 5 35.331	−25 2 42.48
8	7¾	35.224	41.96
		35.277	42.22
			+.14

No. 15.

1898			
Dec. 15	4	7 6 39.286	−0 19 25.83
16		39.343	25.38
		39.314	25.60
			−.09

No. 18.

1899			
Jan. 30	5	7 5 27.677	−39 29 36.93
Feb. 6		27.605	38.55
		27.641	37.74
			+.62

No. 19.

1898	Mag.	h	m	s	°	′	″
Dec. 22	6½	7	7	8.898	−5	16	29.79
23	6½			8.973			29.83
				8.936			29.81
							−.06

No. 27.

1899							
Feb. 9	6	7	8	22.189	−11	4	50.61
10	5¾			22.204			50.20
				22.196			50.40
							−.01

No. 31.

1898							
Dec. 27	6	7	8	1.841	−25	46	19.28
1899				+2.455			−5.87
Jan. 20	6			4.292			24.93
							+.15

No. 41.

1899							
Jan. 23	6	7	8	55.142	−40	19	44.04
26	5			.070			41.31
Feb. 15	5¾			.125			43.11
				55.112			42.82
							+.72

No. 44.

1898							
Dec. 15	6½	7	9	51.729	−30	54	30.78
16				51.761			30.27
				51.745			30.52
							+.26

No. 45.

1899							
Jan. 27	5	7	10	8.220	−26	10	42.36
28	5½			8.176			42.82
				8.198			42.59
							+.16

No. 46.

1898							
Dec. 22	6	7	10	53.547	−10	24	18.19
23	5¾			53.664			18.51
				53.606			18.35
							−.02

No. 51.

1899							
Jan. 30	4½	7	10	42.812	−26	35	51.74
Feb. 6	4			42.797			51.38
				42.804			51.56
							+.17

No. 54.

1899							
Feb. 7	5	7	10	12.059	−45	0	30.13
8	5½			12.041			29.28
				12.050			29.71
							+2.45

No. 55.

1899							
Feb. 13	4½	7	10	27.362	−44	28	34.39
20	4½			27.334			35.15
				27.348			34.77
							+2.15

No. 56.

1898	Mag.	h	m	s	°	′	″
Dec. 15	6	7	12	33.279	−6	29	51.68
16				33.271			51.32
				33.275			51.50
							−.05

No. 58.

1899							
Feb. 9	6	7	11	39.446	−41	15	0.64
10	6			39.532			1.99
				39.489			1.31
							+.95

No. 59.

1898							
Dec. 27	5	7	12	29.730	−27	42	3.18
1899				+2.405			−6.24
Jan. 20	5			32.178			10.07
							+.19

No. 65.

1899							
Jan. 23		7	13	2.301	−38	8	21.89
26	6			2.233			21.62
				2.267			21.75
							+.53

No. 66.

1899							
Jan. 27	5½	7	13	13.645	−36	24	45.39
28	5½			13.658			44.52
				13.651			44.96
							+.44

No. 68.

1899							
Feb. 7	3	7	13	34.639	−36	54	58.63
8	3			34.553			58.99
				34.596			58.81
							+.47

No. 71.

1898							
Dec. 15		7	14	25.525	−24	22	21.66
16				25.530			21.59
				25.527			21.62
							+.13
Obs. Lat. 303						37	20 26.34
Red. Lat.							26.51
							−.37

No. 72.

1899							
Jan. 30	5	7	14	31.219	−24	46	13.04
Feb. 6	5			.287			13.15
				31.253			13.10
							+.14

Anon.

1899							
Feb. 13	7½	7	14	37.164	−24	45	51.15
							+.14

No. 73.

1899							
Feb. 20	6¼	7	15	1.464	−24	46	13.40
24	6			1.450			13.19
				1.457			13.30
							+.14

No. 74.

1898	Mag.	h	m	s	°	′	″
Dec. 22	5	7	14	40.823	−36	32	54.14
23	5			40.673			55.57
				40.748			54.86
							+.45

No. 78.

1899							
Feb. 21	5½	7	15	2.630	−36	33	29.31
22	5½			2.765			29.45
				2.697			29.38
							+.45

No. 80.

1899							
Feb. 15	6	7	15	6.907	−39	1	34.01
16	6			6.832			31.52
				6.870			32.76
							+.58

No. 82.

1899							
Feb. 9	5¾	7	14	56.626	−43	48	10.19
10	6			56.689			12.97
				56.657			11.58
							+1.83

No. 85.

1899							
Jan. 23		7	17	11.409	−8	47	17.82
26				11.420			18.23
				11.414			18.02
							−.03
Obs. Lat. 303						37	20 26.15
Red. Lat.							26.20
							−.21

No. 86.

1899							
Feb. 7	6	7	17	28.173	−5	47	24.99
8	6			28.186			25.38
				28.180			25.18
							−.05

No. 88.

1898							
Dec. 27		7	16	53.020	−25	42	1.08
1899				+2.465			−6.60
Jan. 20	5½			55.536			6.60
							+.15

No. 93.

1898							
Dec. 22	8	7	18	17.222	−31	50	17.34
23	7¾			17.094			19.17
				17.158			18.26
1899				+2.290			+.29
Feb. 21				19.388			. .

No. 96.

1899							
Feb. 9	6½	7	18	44.379	−31	51	8.81
10	6½			.399			. .
21	6			.393			9.15
				44.390			8.98
							+.29

Anon.

1899							
Feb. 10	7½	7	19	23.992	−31	51	6.01
							+.29

No. 99.

1899	Mag.	h	m	s	°	′	″
Jan. 30	5½	7	19	8.998	−31	43	44.76
Feb. 6	5½			9.056			45.85
				9.027			45.30
							+.28

No. 100.

1899	Mag.	h	m	s	°	′	″
Jan. 23	5½	7	20	6.288	−16	0	10.85
26	5½			6.256			10.40
				6.272			10.62
							+.03

No. 102.

1899	Mag.	h	m	s	°	′	″
Feb. 13	5	7	19	40.918	−32	0	22.54
20				41.003			23.27
				40.960			22.90
							+.29

No. 103.

1899	Mag.	h	m	s	°	′	″
Feb. 15	6½	7	19	52.862	−29	5	34.93
16	6½			52.842			35.24
				52.852			35.08
							+.22

No. 104.

1898		h	m	s	°	′	″
Dec. 27	3	7	20	3.667	−29	6	15.39
1899				+2.373			−6.86
Jan. 20	3			5.978			21.38
							+.22

No. 108.

1898		h	m	s	°	′	″
Dec. 15	5½	7	20	49.376	−31	36	30.24
16				49.341			30.38
				49.358			30.31
							+.28

No. 113.

1899		h	m	s	°	′	″
Jan. 27	6	7	21	50.342	−31	32	16.74
28	6			50.400			17.06
				50.371			16.90
							+.28

No. 116.

1898		h	m	s	°	′	″
Dec. 22		7	23	3.956	−11	20	59.64
23				3.987			59.96
				3.971			59.80
							−.01
Obs. Lat. 303						37	20 26.06
Red. Lat.							26.21
							−.23

No. 116.

1899		h	m	s	°	′	″
Feb. 15		7	23	6.785	−11	20	6.67
16				.766			7.10
21				.766			6.38
22				.702			6.76
				6.755			6.73
							−.01
Obs. Lat. 303						37	20 26.23
Red. Lat.							26.17
							−.23

No. 119.

1899	Mag.	h	m	s	°	′	″
Jan. 30	6	7	22	57.149	−33	56	14.98
Feb. 6	5½			57.221			16.75
				57.185			15.86
							+.35

No. 120.

1899		h	m	s	°	′	″
Jan. 23	6	7	24	31.263	−7	20	47.27
26	5½			31.218			47.24
				31.240			47.25
							−.04

No. 121.

1898		h	m	s	°	′	″
Dec. 15	7	7	23	28.577	−33	40	57.22
16				28.473			57.32
				28.525			57.27
							+.34

No. 122.

1898		h	m	s	°	′	″
Dec. 27	6	7	23	56.206	−28	56	52.44
1899				+2.382			−7.18
Jan. 20	6			58.637		57	0.77
							+.21

No. 123.

1899		h	m	s	°	′	″
Feb. 13	6	7	24	39.813	−28	54	38.59
20	6			39.868			38.08
				39.840			38.33
							+.21

No. 124.

1899		h	m	s	°	′	″
Jan. 27	6	7	24	58.442	−31	38	26.59
28	6½			58.457			26.19
				58.450			26.39
							+.28

No. 125.

1899		h	m	s	°	′	″
Feb. 7	6	7	25	10.949	−31	14	52.65
8	6			11.002			52.91
				10.976			52.78
							+.27

No. 130.

1899		h	m	s	°	′	″
Feb. 9	5¾	7	25	35.943	−38	36	13.29
10	5½			36.011			13.97
				35.977			13.63
							+.46

No. 135.

1899		h	m	s	°	′	″
Jan. 30	4	7	26	1.583	−43	5	49.99
Feb. 6	4			1.701			52.54
				1.642			51.26
							+1.54

No. 137.

1898		h	m	s	°	′	″
Dec. 15	5	7	26	44.596	−30	44	52.09
16				44.615			51.71
				44.606			51.90
							+.26

No. 147.

1898	Mag.	h	m	s	°	′	″
Dec. 22	6½	7	29	59.912	−23	15	5.36
23	6½			59.961			5.67
				59.936			5.51
							+.12

No. 148.

1898		h	m	s	°	′	″
Dec. 15	7	7	29	47.256	−28	20	47.77
16				47.079			48.21
				47.167			47.99
							+.20

No. 149.

1899		h	m	s	°	′	″
Feb. 7	6½	7	30	3.163	−23	15	16.75
8	6½			3.090			16.39
				3.126			16.57
							+.12

No. 154.

1898		h	m	s	°	′	″
Dec. 27	6½	7	30	16.690	−25	53	35.60
1899				+2.473			−7.70
Jan. 20				19.206			44.01
							+.16

No. 157.

1899		h	m	s	°	′	″
Jan. 26	5½	7	30	11.756	−36	7	7.02
Feb. 13	5½			11.764			8.46
				11.760			7.74
							+.43

No. 162.

1899		h	m	s	°	′	″
Jan. 30		7	32	15.394	−3	53	7.75
Feb. 6				.409			7.59
9				.395			7.62
10				.386			6.64
15				.368			7.11
16				.366			7.23
24				.374			8.22
Mar. 3				.381			7.34
				15.384			7.44
							−.06
Obs. Lat. B. J.						37	20 25.71
Red. Lat.							25.67
							−.18

No. 163.

1899		h	m	s	°	′	″
Jan. 27	5	7	31	19.590	−28	8	46.00
28	5½			19.666			45.96
				19.628			45.98
							+.20

No. 165.

1898		h	m	s	°	′	″
Dec. 15	6½	7	31	35.109	−23	19	21.16
16				35.082			22.33
				35.096			21.74
							+.12

No. 172.

1898		h	m	s	°	′	″
Dec. 27	5½	7	33	35.631	−34	44	20.28
1899				+2.221			−7.97
Jan. 20	5			37.900			31.00
							+.38

No. 173.

1898	Mag.	h	m	s	°	′	″
Dec. 22	5½	7	34	3.245	−25	8	0.05
23	5½			3.168			0.48
				3.206			0.26
							+.14

No. 175.

1898							
Dec. 15	6	7	34	38.563	−26	34	9.65
16				38.504			10.54
				38.533			10.09
							+.17

No. 177.

1899							
Feb. 13	6	7	34	41.499	−26	34	27.31
20	6			41.535			27.57
				41.517			27.44
							+.17

No. 180.

1899							
Jan. 23	6½	7	35	4.317	−36	15	59.34
26	6			4.338			59.75
				4.327			59.55
							+.44

No. 181.

1899							
Jan. 27		7	36	25.321	−9	18	56.00
28				.269			55.29
Mar. 6				.311			55.85
7				.271			56.19
10				.222			55.23
11				.248			55.46
				25.274			55.67
							−.03
Obs. Lat. B. J.					37	20	25.67
Red. Lat.							25.59
							−.21

No. 185.

1899							
Jan. 30	5	7	35	53.848	−38	4	35.14
Feb. 6	5			53.794			34.53
				53.821			34.83
							+.53

No. 186.

1899							
Feb. 7	6	7	36	9.697	−37	54	25.54
8	5½			9.668			25.72
				9.682			25.63
							+.52

No. 188.

1899							
Feb. 15	6	7	36	14.122	−38	1	40.70
16	6			14.033			39.02
				14.077			39.86
							+.53

No. 190.

1899							
Feb. 9		7	36	21.747	−37	20	45.82
10				21.716			45.05
				21.731			45.43
							+.49

No. 193.

1898	Mag.	h	m	s	°	′	″
Dec. 15	5½	7	37	40.612	−38	17	42.44
16				40.618			42.99
				40.615			42.71
							+.54

No. 195.

1898							
Dec. 22	6	7	38	35.470	−26	6	31.59
23	6			35.417			32.38
				35.443			31.98
							+.16

No. 197.

1898							
Dec. 27	7	7	38	22.690	−38	17	18.56
1899				+2.113			−8.35
Jan. 20	7			24.899			28.83
							+.54

No. 200.

1899							
Jan. 23	5	7	39	27.743	−28	10	15.42
26	5			27.666			14.67
				27.704			15.05
							+.20

No. 201.

1899							
Jan. 30	5	7	39	45.231	−28	42	48.06
Feb. 6	5			45.271			49.00
				45.251			48.53
							+.21

No. 202.

1898							
Dec. 15	7½	7	40	41.406	−5	25	52.14
16				41.388			52.45
				41.397			52.29
							−.05

No. 203.

1899							
Jan. 27	6	7	39	30.207	−35	48	35.64
28	5½			30.238			36.44
				30.222			36.04
							+.42

No. 204.

1899							
Mar. 10	6½	7	40	49.974	−14	26	27.48
11	6½			49.965			27.32
				49.970			27.40
							+.01

No. 205.

1899							
Feb. 9	6	7	40	50.378	−14	26	42.92
10	6			50.409			43.18
				50.393			43.05
							+.01

No. 206.

1899							
Feb. 7	7½	7	40	7.074	−35	58	36.21
8	7½			7.053			35.12
				7.063			35.66
							+.43

No. 208.

1899	Mag.	h	m	s	°	′	″
Feb. 13	6	7	40	8.204	−37	57	38.29
20	6½			8.308			42.07
				8.256			40.18
							+.52

No. 209.

1899							
Feb. 15	7½	7	40	16.178	−37	28	44.50
16	7½			16.110			41.19
				16.144			42.85
							+.50

No. 210.

1898							
Dec. 27		7	41	15.016	−14	18	56.68
1899				+2.765			−8.58
Jan. 20				17.814		19	5.29
							+.01
Obs. Lat. 303					37	20	25.59
Red. Lat.							25.69
							−.25

No. 211.

1899							
Feb. 24	5½	7	39	49.693	−44	54	3.90
Mar. 3	5			49.630			8.56
				49.661			6.23
							+2.38

No. 212.

1899							
Mar. 6	6	7	40	28.252	−35	49	19.62
7	5½			28.204			20.83
				28.228			20.22
							+.42

No. 213.

1899							
Feb. 21	5	7	40	15.485	−40	41	14.84
22	5½			15.552			15.81
				15.518			15.32
							+.80

No. 214.

1899							
Feb. 24	4	7	41	39.322	−37	43	25.41
Mar. 3	4			39.383			27.13
				39.352			26.27
							+.51

No. 217.

1898							
Dec. 15	6½	7	43	10.105	−11	56	31.29
16				10.077			31.49
				10.091			31.39
							−.01

No. 218.

1898							
Dec. 22	6	7	42	32.192	−37	41	5.65
23	6			32.202			4.14
				32.197			4.90
							+.51

No. 219.

1899							
Feb. 15	7	7	43	46.127	−11	58	0.99
16	7¼			46.100			2.18
				46.113			1.58
							−.01

No. 220.

1899	Mag.	h	m	s	°	′	″
Jan. 23	5½	7	43	53.268	−25	41	11.35
26	5			53.249			12.26
				53.258			11.81
							+.15

No. 225.

1899							
Jan. 27	5½	7	43	50.516	−38	15	41.46
28	5½			50.577			42.55
				50.546			42.00
							+.54

No. 226.

1899							
Jan. 30	7¾	7	44	38.078	−24	42	52.31
Feb. 6	7½			38.059			52.95
				38.068			52.63
							+.14

No. 227.

1899							
Mar. 6	7	7	45	27.724	−3	20	31.73
7	7			27.600			31.95
				27.662			31.84
							−.07

No. 228.

1899							
Feb. 21		7	45	19.337	−8	55	41.93
22	6			19.403			42.54
				19.370			42.23
							−.03

No. 229.

1899							
Feb. 9	5	7	45	7.434	−16	58	15.66
10	5½			7.477			15.46
				7.456			15.56
							+.04

No. 230.

1899							
Feb. 13	4	7	45	2.744	−24	36	22.87
20	3			2.807			23.21
				2.776			23.04
							+.13

No. 231.

1899							
Feb. 7	6¾	7	44	45.420	−31	21	56.91
8	6½			45.453			56.40
				45.436			56.65
							+.27

No. 235.

1899							
Mar. 10	5½	7	44	28.413	−46	21	31.13
11	5½			.305			33.91
Apr. 4				.391			31.43
				28.370			32.16
							+3.38

No. 237.

1898							
Dec. 15	6	7	45	26.750	−34	59	13.37
16				26.701			13.70
				26.726			13.54
							+.39

No. 239.

1899	Mag.	h	m	s	°	′	″
Jan. 27	6	7	46	57.518	−12	33	40.24
28	6			57.478			39.89
				57.498			40.06
							.00

No. 240.

1899							
Feb. 13		7	47	5.657	−13	37	47.99
20				.612			48.07
Mar. 4				.736			47.63
				5.668			47.90
							+.01
Obs. Lat. 303						37	20 26.46
Red. Lat.							26.41
							−.25

No. 241.

1899							
Feb. 15	7	7	47	14.671	−18	5	55.84
16	7			14.613			56.57
				14.642			56.21
							+.05

No. 242.

1899							
Feb. 7	6	7	47	48.691	−5	10	1.30
8	6			48.719			1.23
				48.705			1.26
							−.06

No. 243.

1899							
Jan. 30	5¾	7	47	39.959	−14	35	12.29
Feb. 6	6			39.963			11.97
				39.961			12.13
							+.02

No. 244.

1899							
Feb. 24	5	7	46	9.773	−46	7	11.85
Mar. 3	5			9.755			15.51
				9.764			13.68
							+3.20

No. 245.

1899							
Mar. 10	6½	7	47	46.822	−13	36	1.25
11	6			46.855			1.90
				46.838			1.57
							+.01

No. 247.

1899							
Feb. 24	6¼	7	49	28.317	−2	31	55.01
Mar. 3	6½			28.318			54.69
				28.317			54.85
							−.07

No. 250.

1898							
Dec. 15	5½	7	48	27.167	−34	26	55.92
16				27.118			55.99
				27.142			55.95
							+.37

No. 253.

1899	Mag.	h	m	s	°	′	″
Feb. 21	5	7	48	44.681	−40	18	57.97
22	5			44.740			57.75
				44.710			57.86
							+.72

No. 254.

1899							
Feb. 9	5	7	49	4.102	−38	36	5.97
10	5			4.174			7.31
				4.138			6.64
							+.56

No. 256.

1899							
Mar. 6	5½	7	49	20.778	−36	6	5.90
7	5½			20.696			6.81
				20.737			6.36
							+.43

No. 259.

1899							
Jan. 27	5½	7	50	26.394	−35	36	46.47
28	6			26.381			46.22
				26.387			46.34
							+.41

No. 262.

1898							
Dec. 15	6	7	50	49.799	−34	34	41.14
16				49.790			41.66
				49.794			41.40
							+.37

No. 264.

1898							
Dec. 27	7	7	52	7.387	−22	43	57.37
1899				+2.578			−9.43
Jan. 20	7½			10.002		44	6.49
							+.11

No. 266.

1898							
Dec. 22		7	52	28.413	−22	36	28.84
23				28.365			28.08
				28.389			28.46
							+.11
Obs. Lat. 303						37	20 26.15
Red. Lat.							26.30
							−.35

No. 266.

1899							
Jan. 23		7	52	31.048	−22	36	37.57
26				30.956			38.33
Feb. 21				30.966			38.60
22				30.955			38.57
Mar. 10				31.012			38.12
11				31.033			37.66
				30.995			38.14
							+.11
Obs. Lat. 303						37	20 26.54
Red. Lat.							26.49
							−.35

No. 268.

1899	Mag.	h	m	s	°	′	″
Jan. 30	8	7	53	27.238	−3	21	24.65
Feb. 6	7½			27.244			54.48
				27.241			54.56
							−.07

No. 274.

1899							
Feb. 13	6	7	52	29.630	−43	34	37.14
Mar. 4	6½			29.757			38.42
				29.693			37.78
							+1.73

No. 277.

1899							
Feb. 9	5½	7	53	38.519	−30	3	46.99
10	5½			38.623			46.67
				38.571			46.83
							+.24

No. 278.

1898							
Dec. 15		7	54	38.407	−3	24	4.83
16				38.398			5.41
				38.402			5.12
							−.07
Obs. Lat. 303					37	20	25.48
Red. Lat.							25.66
							−.17

No. 278.

1899							
Feb. 7		7	54	41.424	−3	24	14.58
8				.398			15.15
Mar. 6				.408			14.58
7				.354			14.89
				41.396			14.80
							−.07
Obs. Lat. 303					37	20	25.27
Red. Lat.							25.20
							−.17

No. 281.

1899							
Jan. 27	5½	7	54	45.854	−23	2	10.22
28	5½			45.830			9.44
				45.842			9.83
							+.11

No. 283.

1899							
Feb. 15	5	7	54	2.117	−43	50	22.12
16	5½			2.104			18.53
				2.110			20.32
							+1.85

No. 284.

1898							
Dec. 22	5	7	56	1.964	−1	6	33.38
23	5½			1.970			33.48
				1.967			33.43
							−.08

No. 287.

1898							
Dec. 27	7	7	55	40.712	−23	4	19.76
1899				+2.574			−9.70
Jan. 20	7½			43.320			29.63
							+.11

No. 288.

1899	Mag.	h	m	s	°	′	″
Feb. 24	5½	7	54	41.375	−45	18	22.01
Mar. 3				41.396			27.75
				41.386			24.88
							+2.62

No. 292.

1899							
Dec. 15		7	55	52.392	−39	0	59.40
16				52.289		1	1.39
				52.340		1	0.39
							+.58

No. 300.

1898							
Dec. 15	6¾	7	59	52.188	−3	12	24.35
16				52.230			24.72
				52.209			24.54
							−.07

No. 301.

1898							
Dec. 27	6	7	59	5.290	−32	10	38.84
1899				+2.343			−9.96
Jan. 20	6			7.684			50.43
							+.30

No. 302.

1898							
Dec. 22	8	7	59	56.179	−19	29	15.21
23	7¾			56.188			15.38
				56.183			15.30
							+.07

No. 303.

1899							
Jan. 30		8	0	12.397	−19	26	31.24
Feb. 6	6			12.491			31.36
				12.444			31.30
							+.06

No. 305.

1899							
Feb. 7	5½	8	0	20.031	−32	23	21.67
8	5½			19.978			21.13
				20.004			21.40
							+.30

No. 306.

1899							
Jan. 23		8	0	2.114	−39	43	8.18
26	3			2.028			8.51
				2.071			8.35
							+.63

No. 316.

1899							
Feb. 15	4½	8	3	30.980	−2	41	22.83
16	5			31.096			22.92
				31.038			22.87
							−.07

No. 318.

1899							
Feb. 13	7	8	3	19.105	−13	12	50.86
Mar. 4	6¾			19.108			50.11
				19.106			50.48
							.00

No. 320.

1899	Mag.	h	m	s	°	′	″
Jan. 30		8	3	14.547	−24	0	48.65
Feb. 6				.550			48.75
7				.582			48.28
8				.626			48.35
9				.506			47.62
10				.565			47.38
Apr. 3				.499			47.50
4				.521			47.67
5				.506			46.35
6				.560			46.61
				14.546			47.77
							+.13
Obs. Lat. B. J.					37	20	25.87
Red. Lat.							25.76
							−.37

No. 1.

1899							
Feb. 21	5	8	4	31.061	−18	56	57.48
22	5½			31.115			57.62
				31.088			57.55
							+.06

No. 2.

1899							
Mar. 10	7	8	5	9.334	−6	26	49.81
11	7			9.367			49.03
				9.350			49.42
							−.05

No. 9.

1899							
Feb. 24	6	8	5	58.921	−13	20	8.67
Mar. 3	6			58.999			7.28
				58.960			7.97
							+.01

No. 11.

1899							
Mar. 6	5½	8	6	31.978	−12	37	38.15
7	5½			31.958			38.07
				31.968			38.11
							.00

No. 12.

1899							
Feb. 15	7½	8	6	31.984	−18	40	28.04
16	7½			31.982			28.23
				31.983			28.13
							+.06

No. 16.

1998							
Apr. 3	6	8	6	22.316	−42	20	35.66
4				22.17			36.07
				22.243			35.86
							+1.28

No. 17.

1899							
Apr. 5	6	8	7	17.707	−36	59	32.38
6				17.812			30.57
				17.760			31.47
							+.47

No. 18.

1899	Mag.	h	m	s	°	′	″
Mar. 10		8	8	41.412	−15	29	1.99
11				41.540			2.47
				41.476			2.23
							+.02
Obs. Lat. B. J.					37	20	26.18
Red. Lat.							26.04
							−.26

No. 21.

1899	Mag.	h	m	s	°	′	″
Mar. 27	5	8	7	45.037	−39	19	3.59
Apr. 4	5			44.999			4.56
				45.018			4.08
							+.60

No. 22.

1899	Mag.	h	m	s	°	′	″
Feb. 21	5½	8	8	1.176	−42	41	13.20
22	5½			1.236			11.89
				1.206			12.55
							+1.40

No. 25.

1899	Mag.	h	m	s	°	′	″
Feb. 24	7½	8	9	15.658	−31	51	7.08
Mar. 3	7½			15.635			10.15
				15.646			8.61
							+.26

No. 27.

1899	Mag.	h	m	s	°	′	″
Mar. 6	6½	8	8	42.698	−43	5	52.25
7	6½			42.743			55.05
				42.720			53.65
							+1.54

No. 29.

1899	Mag.	h	m	s	°	′	″
Apr. 5	6	8	8	49.374	−46	20	35.21
6				49.470			33.23
				49.422			34.22
							+3.39

No. 31.

1899	Mag.	h	m	s	°	′	″
Mar. 10	5	8	9	40.716	−35	35	40.46
11	5			40.768			39.77
				40.742			40.11
							+.41

No. 32.

1899	Mag.	h	m	s	°	′	″
Feb. 15	5¾	8	10	11.418	−31	50	4.13
16	5¾			11.427			3.01
				11.422			3.57
							+.29

No. 35.

1899	Mag.	h	m	s	°	′	″
Mar. 27		8	10	27.744	−40	2	22.13
Apr. 3	5			.692			21.18
4	5½			.735			22.83
				27.724			22.05
							+.66

No. 38.

1899	Mag.	h	m	s	°	′	″
Feb. 21	6	8	11	9.273	−45	31	41.98
22	6			9.242			39.84
				9.257			40.91
							+2.77

No. 39.

1899	Mag.	h	m	s	°	′	″
Feb. 13	6	8	12	45.229	−15	58	20.82
Mar. 4	6½			45.274			19.93
				45.251			20.37
							+.03

No. 45.

1899	Mag.	h	m	s	°	′	″
Feb. 15	6¾	8	13	55.790	−14	15	4.49
16	6¾			55.777			4.32
				55.783			4.41
							+.01

No. 47.

1899	Mag.	h	m	s	°	′	″
Feb. 21	4½	8	14	46.571	−36	20	47.70
22	4½			46.467			47.57
				46.519			47.63
							+.44

No. 55.

1899	Mag.	h	m	s	°	′	″
Feb. 15	6	8	18	1.970	−12	43	48.65
16	6			2.015			48.58
				1.992			48.61
							.00

No. 56.

1899	Mag.	h	m	s	°	′	″
Feb. 13	5	8	17	24.330	−32	43	59.94
Mar. 4	5			24.292			59.66
				24.311			59.80
							+.31

No. 60.

1899	Mag.	h	m	s	°	′	″
Feb. 21	5½	8	18	33.765	−26	1	28.26
22	6			33.875			28.42
				33.820			28.34
							+.16

No. 63.

1899	Mag.	h	m	s	°	′	″
Feb. 24	6	8	19	32.858	−3	25	25.74
Mar. 3	5½			32.853			25.39
				32.856			25.56
							−.07

No. 69.

1899	Mag.	h	m	s	°	′	″
Feb. 13		8	20	36.848	−3	34	36.62
Mar. 4				36.812			36.77
				36.830			36.69
							−.07
Obs. Lat. B. J.					37	20	25.79
Red. Lat.							25.75
							−.17

No. 72.

1899	Mag.	h	m	s	°	′	″
Mar. 6	5	8	20	42.064	−23	43	7.13
7	5½			42.107			6.44
				42.086			6.78
							+.12

No. 73.

1899	Mag.	h	m	s	°	′	″
Feb. 15	6	8	21	24.370	−3	39	18.35
16	6			24.420			18.30
				24.395			18.32
							−.07

No. 74.

1899	Mag.	h	m	s	°	′	″
Mar. 10	8	8	20	45.050	−23	43	5.13
11	8			45.061			4.67
				45.056			4.90
							+.12

No. 81.

1899	Mag.	h	m	s	°	′	″
Feb. 24	6½	8	23	23.233	−2	10	56.83
Mar. 3	6			23.281			55.87
				23.257			56.35
							−.07

No. 82.

1899	Mag.	h	m	s	°	′	″
Feb. 21	5½	8	22	19.926	−41	49	23.76
22	5½			20.019			22.85
				19.972			23.31
							+1.12

No. 83.

1899	Mag.	h	m	s	°	′	″
Feb. 13	6½	8	24	21.674	−0	37	23.98
Mar. 4	6¾			21.733			23.31
				21.703			23.64
							−.08

No. 94.

1899	Mag.	h	m	s	°	′	″
Feb. 21	6	8	26	51.348	−19	9	52.28
22	6¾			51.310			52.60
				51.329			52.44
							+.06

No. 95.

1899	Mag.	h	m	s	°	′	″
Feb. 15		8	26	58.560	−19	14	10.81
16				.632			11.15
Mar. 6				.566			10.63
7				.591			11.23
				58.587			10.96
							+.06
Obs. Lat. 303					37	20	26.98
Red. Lat.							26.88
							−.30

No. 97.

1899	Mag.	h	m	s	°	′	″
Feb. 24	7	8	27	33.780	−2	50	11.63
Mar. 3	7			33.838			11.18
				33.809			11.40
							−.07

No. 99.

1899	Mag.	h	m	s	°	′	″
Mar. 10	6	8	26	27.810	−45	59	42.12
11	6			27.613			39.47
				27.711			40.79
							+3.11

No. 100.

1899	Mag.	h m s	° ′ ″
Feb. 13	7½	8 28 26.504	−2 37 56.39
Mar. 4	7½	26.618	56.41
		26.561	56.40
			−.07

No. 109.

1899			
Feb. 21		8 30 32.486	−7 38 4.35
22		.500	4.32
Mar. 10		.470	3.75
11		.449	4.39
		32.476	4.20
			−.04
Obs. Lat. 303			37 20 26.27
Red. Lat.			26.16
			−.20

No. 125.

1899			
Feb. 13	6½	8 32 45.263	−26 3 50.01
Mar. 4	7	45.332	50.45
		45.297	50.23
			+.16

No. 133.

1899			
Mar. 6	6	8 33 33.344	−25 54 4.17
7	6	33.305	4.95
		33.324	4.56
			+.16

No. 138.

1899			
Feb. 24		8 35 14.321	−12 7 6.47
Mar. 3		14.338	4.84
		14.330	5.66
			−.01
Obs. Lat. 303			37 20 26.04
Red. Lat.			25.94
			−.23

No. 139.

1899			
Mar. 10	5	8 34 5.518	−42 38 13.16
11	5	5.552	10.30
		5.535	11.73
			+1.37

No. 140.

1899			
Feb. 21	5½	8 35 30.980	−29 12 5.28
22	5½	30.993	5.67
		30.986	5.47
			+.22

No. 145.

1899			
Feb. 13	5	8 36 8.976	−34 56 59.26
Mar. 4	4	8.978	60.97
		8.977	57 0.11
			+.39

No. 146.

1899			
Feb. 15	5	8 37 2.161	−15 34 49.94
16	5½	2.161	49.10
		2.161	49.52
			+.02

No. 148.

1899	Mag.	h m s	° ′ ″
Mar. 6	6	8 36 36.807	−39 54 19.95
7	6	36.828	20.90
		36.817	20.42
			+.64

No. 151.

1899			
Mar. 27		8 38 38.732	−6 51 21.80
Apr. 3	8	.677	22.07
4	8	.690	21.38
		38.700	21.75
			−.05

No. 152.

1899			
Feb. 24	5½	8 38 42.766	−6 52 12.10
Mar. 3	5½	42.832	12.60
		42.799	12.35
			−.05

No. 155.

1899			
Mar. 10	5	8 37 16.475	−46 17 26.89
11	5	16.314	26.09
		16.394	26.49
			+3.36

No. 159.

1899			
Apr. 5	8½	8 40 14.300	−2 14 2.98
6	8½	14.356	3.65
		14.328	3.31
			−.07

No. 160.

1899			
Feb. 13	6½	8 40 14.693	−2 14 2.10
Mar. 4	7	14.686	1.81
		14.690	1.96
			−.07

No. 162.

1899			
Feb. 21	4	8 39 32.018	−32 49 21.00
22	4	32.035	20.86
		32.026	20.93
			+.31

No. 166.

1899			
Feb. 15	5½	8 41 36.220	−13 10 41.95
16	5	36.203	42.39
		36.211	42.17
			.00

No. 167.

1899			
Mar. 3		8 42 7.830	−1 31 37.52
Apr. 3		.847	36.82
4		.786	36.26
		7.821	36.87
			−.08
Obs. Lat. 303			37 20 26.36
Red. Lat.			26.18
			−.16

No. 168.

1899	Mag.	h m s	° ′ ″
Mar. 6	5	8 40 47.503	−42 17 0.09
7	5	47.561	1.85
		47.532	0.97
			+1.26

No. 169.

1899			
Mar. 10	7½	8 41 8.119	−42 15 37.61
11	7½	8.128	36.79
		8.123	37.20
			+1.25

No. 176.

1899			
Feb. 21	5	8 42 36.188	−45 40 25.90
22		36.396	24.49
		36.292	25.19
			+2.87

No. 177.

1899			
Feb. 13	5½	8 44 17.226	−3 4 5.23
Mar. 4	5½	17.243	4.75
		17.234	4.99
			−.07

No. 187.

1899			
Apr. 5	6½	8 44 30.313	−42 5 28.51
6		30.333	26.65
		30.323	27.58
			+1.20

No. 188.

1899			
Feb. 24	6	8 45 48.193	−29 5 13.38
Mar. 3	6	48.275	14.11
		48.234	13.74
			+.22

No. 189.

1899			
Mar. 6		8 46 36.627	−6 47 55.64
7		36.660	55.43
		36.643	55.53
			−.05
Obs. Lat. 303			37 20 26.11
Red. Lat.			25.98
			−.19

No. 190.

1899			
Feb. 15	5½	8 45 45.287	−32 24 12.72
16	5½	45.278	11.31
		45.282	12.01
			+.30

No. 193.

1899			
Mar. 10	5½	8 46 14.718	−27 20 7.35
11	5	14.676	6.15
		14.697	6.75
			+.18

No. 194.

1899			
Feb. 21	5½	8 45 53.578	−39 56 40.69
22		53.703	39.95
		53.640	40.32
			+.65

No. 198.

1899	Mag.	h	m	s	°	′	″
Apr. 3	5½	8	46	18.117	−44	55	56.07
4	5½			18.063			57.39
				18.090			56.73
							+2.40

No. 205.

1899	Mag.	h	m	s	°	′	″
Apr. 5	6	8	47	7.962	−46	9	6.06
6				7.922			6.50
				7.942			6.28
							+3.23

No. 214.

1899	Mag.	h	m	s	°	′	″
Feb. 15	7	8	50	32.538	−7	35	5.77
16	7			32.641			6.11
				32.590			5.94
							−.04

No. 215.

1899	Mag.	h	m	s	°	′	″
Feb. 24	7	8	50	32.597	−7	35	2.03
Mar. 3				32.606			1.26
				32.601			1.64
							−.04

No. 220.

1899	Mag.	h	m	s	°	′	″
Feb. 21	5¾	8	51	11.628	−27	17	35.67
22	5½			11.636			35.96
				11.632			35.81
							+.18

No. 227.

1899	Mag.	h	m	s	°	′	″
Feb. 13		8	53	59.543	−15	44	50.40
Mar. 4				.575			50.33
10				.517			50.81
11				.438			50.04
Apr. 3				.541			50.20
4				.526			50.28
5				.560			50.14
6				.493			50.39
7				.496			50.54
12				.514			50.94
13				.468			50.10
				59.516			50.38
							+.03
Obs. Lat. 303					37	20	25.91
Red. Lat.							25.73
							−.27

No. 228.

1899	Mag.	h	m	s	°	′	″
Feb. 15	7¼	8	54	51.169	−2	9	16.70
16	6¾			51.164			16.35
				51.166			16.52
							−.07

No. 235.

1899	Mag.	h	m	s	°	′	″
Feb. 21	7	8	56	9.200	−2	9	51.53
22	7			9.236			52.31
				9.218			51.92
							−.07

No. 237.

1899	Mag.	h	m	s	°	′	″
Feb. 24	7	8	56	29.882	−1	4	47.60
Mar. 3	7			29.893			47.42
				29.887			47.51
							−.08

No. 238.

1899	Mag.	h	m	s	°	′	″
Feb. 13	6½	8	57	0.780	−7	58	32.32
Mar. 4	7¼			0.840			32.12
				0.810			32.22
							−.04

No. 242.

1899	Mag.	h	m	s	°	′	″
Mar. 6	5	8	56	19.211	−40	51	37.57
7	5			19.167			39.29
				19.189			38.43
							+.85

No. 246.

1899	Mag.	h	m	s	°	′	″
Dec. 15	7	8	58	50.229	−14	2	16.64
16				50.261			16.22
				50.245			16.43
							+.01

No. 260.

1899	Mag.	h	m	s	°	′	″
Feb. 24	6½	9	2	54.863	−2	4	5.76
Mar. 3	6½			54.882			5.14
				54.872			5.45
							−.08

No. 264.

1899	Mag.	h	m	s	°	′	″
Feb. 15		9	3	45.593	−8	10	52.29
16				.551			51.82
Apr. 14				.512			51.97
17				.554			51.17
				45.552			51.81
							−.04
Obs. Lat. 303					37	20	26.02
Red. Lat.							25.87
							−.20

No. 265.

1899	Mag.	h	m	s	°	′	″
Feb. 21	5	9	3	36.855	−25	27	3.84
22	5			36.868			4.22
				36.861			4.03
							+.15

No. 266.

1899	Mag.	h	m	s	°	′	″
Apr. 3	8	9	2	55.980	−43	5	30.24
4	8			56.093			29.59
				56.036			29.91
							+1.54

No. 267.

1899	Mag.	h	m	s	°	′	″
Mar. 6	5¾	9	4	39.198	−8	22	39.23
7	6			39.193			39.36
				39.196			39.30
							−.03

No. 268.

1899	Mag.	h	m	s	°	′	″
Mar. 10	6½	9	4	13.164	−25	25	50.97
11	6½			13.179			49.73
				13.171			50.35
							+.15

No. 1.

1899	Mag.	h	m	s	°	′	″
Apr. 5	3	9	4	16.840	−43	1	32.81
6				16.866			30.56
				16.853			31.68
							+1.51

No. 5.

1899	Mag.	h	m	s	°	′	″
Apr. 7	7	9	5	19.635	−25	23	33.91
10	7			19.640			34.39
				19.637			34.15
							+.15

No. 7.

1899	Mag.	h	m	s	°	′	″
Apr. 12	5½	9	5	39.596	−29	57	11.57
13	6			39.481			10.34
				39.538			10.95
							+.24

No. 9.

1899	Mag.	h	m	s	°	′	″
Feb. 24	6¾	9	6	51.807	−6	33	57.56
Mar. 3	6¾			51.785			57.38
				51.796			57.47
							−.05

No. 10.

1899	Mag.	h	m	s	°	′	″
Mar. 10	7	9	7	25.717	−6	30	57.63
11	7			25.658			56.86
				25.687			57.24
							−.05

No. 11.

1899	Mag.	h	m	s	°	′	″
Apr. 3	6	9	7	26.818	−6	41	44.24
4	6			26.818			43.58
				26.818			43.91
							−.05

No. 13.

1899	Mag.	h	m	s	°	′	″
Apr. 14		9	7	21.119	−19	20	5.94
17				21.159			5.47
				21.139			5.70
							+.06
Obs. Lat. 303					37	20	26.15
Red. Lat.							25.91
							−.30

No. 16.

1899	Mag.	h	m	s	°	′	″
Mar. 6	6¾	9	8	11.853	−15	0	15.17
7	7			11.879			14.72
				11.866			14.94
							+.02

No. 17.

1899	Mag.	h	m	s	°	′	″
Apr. 5	6	9	7	24.558	−44	27	21.34
6				24.556			16.81
				24.557			19.07
							+2.15

No. 21.

1899	Mag.	h	m	s	°	′	″
Apr. 7	6¾	9	9	16.074	−14	16	36.13
10	6¼			16.065			36.41
				16.070			36.27
							+.01

No. 22.

1899	Mag.	h	m	s	°	′	″
Apr. 14	7¾	9	9	40.714	−4	7	20.01
17	7¾			40.720			19.76
				40.717			19 88
							−.06

No. 24.

1899	Mag.	h	m	s	°	′	″
Feb. 24	6½	9	9	56.222	−8	20	20.91
Mar. 3	6½			56.270			20.40
				56.246			20.66
							−.04

No. 26.

1899	Mag.	h	m	s	°	′	″
Apr. 12	6½	9	9	27.250	−38	11	57.94
13	6½			27.170			56.13
				27.210			57.03
							+.54

No. 27.

1899	Mag.	h	m	s	°	′	″
Mar. 10	7	9	10	36.194	−8	19	21.66
11	7			36.238			21.45
				36.216			21.55
							−.04

No. 30.

1899	Mag.	h	m	s	°	′	″
Mar. 6	5½	9	11	40.803	−5	55	53.93
7	6			40.705			54.35
				40.754			54.14
							−.05

No. 32.

1899	Mag.	h	m	s	°	′	″
Mar. 10	6	9	11	44.426	−8	19	23.59
11	6			44.377			23.58
				44.401			23.58
							−.04

No. 33.

1899	Mag.	h	m	s	°	′	″
Apr. 3	5½	9	10	38.297	−42	48	35.44
4	5½			38.325			33.02
				38.311			34.23
							+1.44

No. 34.

1899	Mag.	h	m	s	°	′	″
Apr. 5	6	9	10	55.443	−37	10	58.11
6				55.477			57.89
				55.460			58.00
							+.48

No. 39.

1899	Mag.	h	m	s	°	′	″
Apr. 5	6	9	12	20.270	−14	9	4.89
6				20.228			5.71
				20.249			5.30
							+.01

No. 40.

1899	Mag.	h	m	s	°	′	″
Feb. 21	5	9	11	37.937	−38	8	56.78
22	5			37.926			58.08
				37.931			57.43
							+.53

No. 41.

1899	Mag.	h	m	s	°	′	″
Apr. 7	5½	9	11	42.570	−36	59	31.58
10	6			42.547			31.01
				42.558			31.29
							+.47

No. 43.

1899	Mag.	h	m	s	°	′	″
Apr. 14	7½	9	12	37.517	−11	32	16.19
17	7			37.533			16.68
				37.525			16.43
							−.01

No. 44.

1899	Mag.	h	m	s	°	′	″
Apr. 12	7	9	11	49.890	−37	12	31.36
13	7			49.795			30.30
				49.842			30.83
							+.48

No. 52.

1899	Mag.	h	m	s	°	′	″
Feb. 24	5¾	9	14	47.075	−15	24	25.86
Mar. 3	5¾			47.080			23.92
				47.077			24.89
							+.02

No. 53.

1899	Mag.	h	m	s	°	′	″
Mar. 6	5½	9	14	54.478	−11	32	55.03
7	6			54.514			54.90
				54.496			54.96
							−.01

No. 56.

1899	Mag.	h	m	s	°	′	″
Apr. 7	7	9	15	25.192	−9	10	54.82
10	7			25.155			54.61
				25.173			54.71
							−.03

No. 57.

1899	Mag.	h	m	s	°	′	″
Feb. 21	5½	9	15	33.128	−9	7	37.06
22	5			33.082			36.97
				33.105			37.01
							−.03

No. 59.

1899	Mag.	h	m	s	°	′	″
Apr. 3	6½	9	16	8.753	−15	11	10.31
4	6			8.725			10.12
				8.739			10.21
							+.02

No. 61.

1899	Mag.	h	m	s	°	′	″
Apr. 12	6½	9	16	27.818	−31	19	54.41
13	7½			27.712			54.49
				27.765			54.45
							+.27

No. 63.

1899	Mag.	h	m	s	°	′	″
Apr. 5		9	17	1.286	−25	32	8.08
6				.313			8.27
14				.262			8.32
17				.355			8.61
				1.304			8.32
							+.15
Obs. Lat. 303					37	20	25.83
Red. Lat.							25.60
							−.39

No. 68.

1899	Mag.	h	m	s	°	′	″
Feb. 24	6½	9	17	55.354	−9	24	24.94
Mar. 3	6½			55.393			24.35
				55.373			24.64
							−.03

No. 71.

1899	Mag.	h	m	s	°	′	″
Mar. 6	7	9	18	52.251	−4	55	42.69
7	6¾			52.242			42.31
				52.246			42.50
							−.06

No. 72.

1899	Mag.	h	m	s	°	′	″
Mar. 10	6½	9	18	58.286	−5	2	0.13
11	6½			58.298		1	59.61
				58.292		1	59.87
							−.06

No. 73.

1899	Mag.	h	m	s	°	′	″
Feb. 21	6½	9	18	37.208	−20	36	20.83
22	6½			37.206			21.06
				37.207			20.95
							+.08

No. 75.

1899	Mag.	h	m	s	°	′	″
Apr. 7	5	9	18	49.874	−28	24	6.25
10	5			49.912			7.14
				49.893			6.69
							+.20

No. 77.

1899	Mag.	h	m	s	°	′	″
Apr. 3	6	9	20	21.036	−4	40	54.16
4	6			21.117			53.82
				21.076			53.99
							−.06

No. 80.

1899	Mag.	h	m	s	°	′	″
Apr. 12	7½	9	20	26.107	−5	58	7.92
13	7			26.087			6.62
				26.097			7.27
							−.05

No. 85.

1899	Mag.	h	m	s	°	′	″
Feb. 24	6	9	21	13.751	−1	1	37.40
Mar. 3	6			13.763			37.17
				13.757			37.28
							−.08

No. 87.

1899	Mag.	h	m	s	°	′	″
Mar. 10	6½	9	22	17.722	−8	47	7.28
11	6½			17.702			7.30
				17.712			7.29
							−.03

No. 89.

1899							
Feb. 21		9	22	37.477	−8	13	14.31
22				37.437			14.63
				37.457			14.47
							−.04
Obs. Lat. B. J.					37	20	25.67
Red. Lat.							25.60
							−.20

No. 93.

1899							
Apr. 5	6½	9	22	29.775	−40	3	51.50
6				29.804			51.43
				29.790			51.46
							+.66

No. 94.

1899							
Apr. 3	5	9	24	1.367	−2	19	38.39
4	5			1.267			38.10
				1.317			38.25
							−.07

No. 95.

1899							
Apr. 12	7½	9	24	1.632	−2	18	33.71
13	7½			1.486			32.49
				1.559			33.10
							−.07

No. 96.

1899							
Feb. 24	6½	9	24	17.240	−1	45	49.40
Mar. 3	6½			17.286			48.93
				17.263			49.16
							−.08

No. 101.

1899							
Apr. 14	6¾	9	25	11.994	−26	9	3.96
17	6½			11.994			4.13
				11.994			4.04
							+.16

No. 102.

1899							
Apr. 5	7	9	25	52.613	−5	13	6.59
6	6½			52.600			7.39
				52.606			6.99
							−.06

No. 103.

1899							
Apr. 7	5	9	25	4.602	−35	30	34.04
10	5			4.593			34.32
				4.597			34.18
							+.41

No. 105.

1899							
Mar. 10	5½	9	25	25.525	−26	8	49.80
11	5½			25.466			49.36
				25.496			49.58
							+.16

No. 110.

1899	Mag.	h	m	s	°	′	″
Mar. 6		9	26	49.981	−0	44	21.38
7				49.947			21.18
				49.964			21.28
							−.08
Obs. Lat. 303					37	20	26.06
Red. Lat.							25.93
							−.16

No. 113.

1899							
Feb. 21	6	9	26	26.486	−31	26	. .
22	6			.564			40.66
Apr. 14	6½			.485			40.50
				26.512			40.58
							+.27

No. 116.

1899							
Apr. 7	5	9	26	43.339	−40	1	28.83
10	4			43.271			29.37
				43.305			29.10
							+.65

No. 117.

1899							
Feb. 21		9	27	12.984	.	.	.
Apr. 3	6			.987	−31	25	34.16
4	5½			.987			35.43
				12.986			34.79
							+.27

No. 122.

1899							
Feb. 24	5½	9	28	18.688	−40	12	11.11
Mar. 3	5½			18.698			13.81
				18.693			12.46
							+.69

No. 123.

1899							
Feb. 21	5½	9	29	30.216	−5	27	50.18
22	5¾			30.274			50.61
				30.245			50.39
							−.05

No. 140.

1899							
Feb. 21	6½	9	32	54.401	−8	58	13.17
22	6½			54.437			13.50
				54.419			13.33
							−.03

No. 142.

1899							
Mar. 10	6	9	32	49.009	−31	43	28.39
11	6			48.956			28.38
				48.982			28.38
							+.28

No. 144.

1899							
Mar. 6	5	9	34	41.855	−0	41	3.55
7	5½			41.870			2.78
				41.862			3.16
							−.08

No. 146.

1899	Mag.	h	m	s	°	′	″
Apr. 3	8	9	34	50.144	−10	15	19.26
4	7½			50.145			19.01
				50.144			19.13
							−.02

No. 147.

1899							
Mar. 10	6½	9	34	51.455	−10	6	48.20
11	6½			51.438			48.03
				51.446			48.11
							−.02

No. 149.

1899							
Apr. 5	5½	9	34	4.818	−42	44	8.84
6				4.752			7.56
				4.785			8.20
							+1.41

No. 152.

1899							
Apr. 7	6½	9	35	24.287	−10	18	41.18
10	6½			24.272			40.88
				24.280			41.03
							−.02

No. 154.

1899							
Feb. 24		9	35	27.912	−13	52	26.37
Mar. 3				.820			25.55
Apr. 14				.836			26.60
				27.856			26.17
							+.01
Obs. Lat. 303					37	20	25.76
Red. Lat.							25.61
							−.25

No. 156.

1899							
Feb. 21	7	9	36	31.556	−10	2	35.03
22	7			31.530			35.08
				31.543			35.05
							−.02

No. 166.

1899							
Mar. 3	5	9	39	42.031	−27	18	26.32
Apr. 14	5¾			41.851			25.70
				41.941			26.01
							+.18

No. 167.

1899							
Mar. 6	6½	9	39	58.090	−22	17	19.14
7	6½			58.114			18.44
				58.102			18.79
							+.10

No. 170.

1899							
Feb. 21	7	9	40	16.882	−27	9	57.03
22	7¼			16.882			56.30
				16.882			56.66
							+.18

No. 178.

1899	Mag.	h	m	s	°	′	″
Mar. 6	7	9	43	11.577	−6	46	36.73
7	6¾			11.619			36.01
				11.598			36.37
							−.05

No. 180.

1899	Mag.	h	m	s	°	′	″
Feb. 21	7½	9	43	32.494	−6	50	57.25
22	8			32.510			57.85
				32.502			57.55
							−.05

No. 182.

1899	Mag.	h	m	s	°	′	″
Mar. 10	6	9	42	34.158	−44	17	21.35
11	6			33.996			19.98
				34.077			20.67
							+2.06

No. 191.

1899	Mag.	h	m	s	°	′	″
Feb. 24		9	45	40.034	−6	54	34.10
Mar. 3	7			39.829			32.24
				39.931			33.17
							−.05

No. 192.

1899	Mag.	h	m	s	°	′	″
Apr. 3	7	9	46	10.677	−1	22	57.01
4	7			10.626			57.17
				10.651			57.09
							−.08

No. 193.

1899	Mag.	h	m	s	°	′	″
Mar. 10		9	46	8.628	−3	46	11.31
11				8.637			11.09
				8.632			11.20
							−.07
Obs. Lat. B. J.					37	20	25.50
Red. Lat.							25.37
							−.17

No. 195.

1899	Mag.	h	m	s	°	′	″
Apr. 7	6	9	46	19.655	−5	42	38.09
10	6½			19.685			38.05
				19.670			38.07
							−.05

No. 196.

1899	Mag.	h	m	s	°	′	″
Mar. 6	5¼	9	46	37.173	−14	22	22.14
7	5			37.210			21.69
				37.191			21.91
							+.01

No. 198.

1899	Mag.	h	m	s	°	′	″
Apr. 5	5	9	46	1.798	−45	15	44.52
6				1.827			42.54
				1.812			43.53
							+2.60

No. 200.

1899	Mag.	h	m	s	°	′	″
Apr. 12	5½	9	47	30.380	−7	37	46.29
13	5½			30.336			45.85
				30.358			46.07
							−.04

No. 203.

1899	Mag.	h	m	s	°	′	″
Apr. 14	7½	9	48	23.822	−9	25	40.50
17				23.777			39.76
				23.800			40.13
							−.03

No. 210.

1899	Mag.	h	m	s	°	′	″
Mar. 6	7¼	9	50	16.963	−10	33	23.48
7	7			16.996			23.15
				16.980			23.31
							−.02

No. 213.

1899	Mag.	h	m	s	°	′	″
Apr. 13	6½	9	50	18.813	−44	48	23.17
14	7			18.881			24.78
				18.847			23.97
							+2.33

No. 219.

1899	Mag.	h	m	s	°	′	″
Apr. 3	6½	9	52	35.518	−1	27	39.69
4	6			35.457			39.06
				35.487			39.37
							−.08

No. 220.

1899	Mag.	h	m	s	°	′	″
Apr. 5	8¼	9	52	40.193	−1	27	55.36
6	7½			40.186			55.26
				40.190			55.31
							−.08

No. 227.

1899	Mag.	h	m	s	°	′	″
Feb. 24		9	54	32.304	−35	24	25.44
Mar. 3	5¾			32.260			28.28
				32.282			26.86
							+.40

No. 228.

1899	Mag.	h	m	s	°	′	″
Feb. 21	6¾	9	55	52.413	−2	42	14.45
22	6¾			52.472			14.93
				52.442			14.69
							−.07

No. 231.

1899	Mag.	h	m	s	°	′	″
Mar. 6	7¾	9	56	56.629	−12	24	44.47
7	7¾			56.680			43.88
				56.654			44.17
							.00

No. 232.

1899	Mag.	h	m	s	°	′	″
Feb. 24		9	57	39.505	−12	48	36.61
Mar. 3	6½			39.431			35.28
				39.468			35.94
							.00

No. 241.

1899	Mag.	h	m	s	°	′	″
Feb. 21		10	0	12.340	−12	34	29.29
22				.380			29.25
Apr. 3				.368			29.70
4				.369			29.54
5				.365			29.60
6				.361			29.85
7				.348			29.61
10				.324			29.55
12				.348			29.33
13				.315			29.16
				12.352			29.49
							.00
Obs. Lat. 303					37	20	26.22
Red. Lat.							26.02
							−.24

No. 247.

1899	Mag.	h	m	s	°	′	″
Mar. 6	7	10	1	1.722	−34	23	30.52
7	7			1.766			29.68
				1.744			30.10
							+.37

No. 1.

1899	Mag.	h	m	s	°	′	″
Mar. 10	6	10	5	6.416	−7	54	43.57
11	6			6.398			42.89
				6.407			43.23
							−.04

No. 2.

1899	Mag.	h	m	s	°	′	″
Mar. 6		10	5	39.817	−11	51	17.48
7				39.826			16.79
				39.821			17.14
							−.01
Obs. Lat. B. J.					37	20	25.63
Red. Lat.							25.50
							−.23

No. 5.

1899	Mag.	h	m	s	°	′	″
Apr. 3	6	10	5	54.525	−7	55	12.43
4	6			54.537			12.00
				54.531			12.21
							−.04

No. 6.

1899	Mag.	h	m	s	°	′	″
Apr. 5	6	10	6	15.063	−6	49	8.34
6	6			15.042			8.45
				15.052			8.39
							−.05

No. 8.

1899	Mag.	h	m	s	°	′	″
Apr. 7	7	10	8	14.811	−7	56	42.26
10	7			14.775			42.24
				14.793			42.25
							−.04

No. 11.

1899	Mag.	h	m	s	°	′	″
Apr. 12	7	10	8	26.639	−4	35	10.57
13	7			26.638			10.79
				26.638			10.68
							−.06

No. 15.

1899	Mag.	h	m	s	°	′	″
Mar. 6	7	10	8	41.453	−4	43	10.51
7	7			41.466			10.21
				41.460			10.36
							−.06

No. 16.

1899							
Mar. 10	6½	10	8	42.940	−6	53	3.54
11	6½			42.956			3.67
				42.948			3.60
							−.05

No. 17.

1899							
Apr. 5	6½	10	9	6.395	−7	29	32.09
6	6½			6.361			32.03
				6.378			32.06
							−.04

No. 18.

1899							
Apr. 3	6	10	8	57.065	−32	32	0.34
4	6½			57.032		31	59.92
				57.048		32	0.13
							+.31

No. 29.

1899							
Apr. 14	5	10	10	29.783	−41	37	18.58
17	4			29.694			21.46
				29.738			20.02
							+1.05

No. 32.

1899							
Apr. 7	6	10	11	17.142	−42	36	30.67
10	6			17.174			31.07
				17.158			30.87
							+1.36

No. 33.

1899							
Mar. 10		10	12	36.635	−7	33	52.26
11				.563			52.38
Apr. 12				.651			52.14
13				.682			51.60
				36.633			52.09
							−.04
Obs. Lat. 303						37	20 26.45
Red. Lat.							26.26
							−.20

No. 35.

1899							
Mar. 6	7	10	13	6.777	−0	44	19.93
7	7½			6.791			19.32
				6.784			19.62
							−.08

No. 39.

1899							
Apr. 3	5½	10	13	29.764	−28	29	14.01
4	5½			29.829			12.99
				29.796			13.50
							+.21

No. 41.

1899	Mag.	h	m	s	°	′	″
Apr. 5	6½	10	14	27.191	−4	35	51.95
6	6			27.169			51.80
				27.180			51.87
							−.06

No. 43.

1899							
Apr. 7	8	10	14	28.836	−28	27	13.63
10	8			28.817			14.01
				28.826			13.82
							+.20

No. 56.

1899							
Mar. 6	7½	10	17	43.628	−29	2	52.36
7	7½			43.674			51.70
				43.651			52.03
							+.22

No. 59.

1899							
Apr. 5		10	18	20.195	−3	33	49.60
6				20.172			48.82
				20.183			49.21
							−.07
Obs. Lat. 303						37	20 26.11
Red. Lat.							25.89
							−.17

No. 61.

1899							
Mar. 10	5	10	17	59.596	−41	8	31.58
11				59.586			30.54
				59.591			31.06
							+.92

No. 65.

1899							
Apr. 3	6½	10	19	16.875	−29	8	13.02
4	6½			16.840			12.63
				16.857			12.82
							+.22

No. 66.

1899							
Apr. 7	6	10	19	3.943	−37	29	50.80
10	6			3.982			50.50
				3.962			50.65
							+.50

No. 68.

1899							
Apr. 14	Neb.	10	19	54.17	−18	7	53.6
17				54.23			52.8
				54.20			53.2
							+.05

No. 71.

1899							
Apr. 12	6	10	20	41.292	−6	33	2.23
13	6			41.385			1.99
				41.338			2.11
							−.05

No. 74.

1899	Mag.	h	m	s	°	′	″
Mar. 6		10	21	12.304	−16	19	13.91
7				12.345			13.96
				12.324			13.94
							+.03
Obs. Lat. B. J.						37	20 25.07
Red. Lat.							24.94
							−.27

No. 75.

1899							
Mar. 10	6	10	21	40.682	−3	52	27.40
11	6½			40.634			27.07
				40.658			27.23
							−.06

No. 81.

1899							
Apr. 3	8¼	10	22	48.696	−2	11	52.74
4	8¼			48.714			52.34
				48.705			52.54
							−.07

No. 82.

1899							
Apr. 7		10	22	31.845	−30	33	12.42
10				31.860			13.00
				31.852			12.71
							+.25
Obs. Lat. B. J.						37	20 24.98
Red. Lat.							24.75
							−.49

No. 86.

1899							
Apr. 5	5¾	10	24	20.888	−2	13	19.70
6	5½			20.885			19.47
				20.886			19.58
							−.07

No. 90.

1899							
Mar. 10	6	10	24	48.999	−29	8	50.20
11	6			49.010			49.87
				49.004			50.03
							+.22

No. 91.

1899							
Apr. 12	6	10	24	56.389	−30	5	25.04
13	6			56.349			25.25
				56.369			25.14
							+.24

No. 92.

1899							
Apr. 14	8	10	24	53.624	−32	53	29.63
17	8			53.611			28.33
				53.617			28.98
							+.32

No. 94.

1899							
Apr. 3		10	25	55.347	−7	7	9.59
4				55.377			9.83
				55.362			9.71
							−.04
Obs. Lat. 303						37	20 26.26
Red. Lat.							26.04
							−.20

No. 103.

1899	Mag	h	m	s	°	′	″
Apr. 5	7¼	10	27	36.807	−23	4	56.77
6	7¼			36.802			57.35
				36.804			57.06
							+.11

No. 104.

1899							
Apr. 7	7	10	27	46.335	−16	26	11.27
10	7			46.371			11.35
				46.353			11.31
							+.03

No. 106.

1899							
Apr. 12	6½	10	27	37.826	−44	33	2.24
13	6½			37.779			0.58
				37.802			1.41
							+2.19

No. 107.

1899							
Apr. 14	6¼	10	27	38.685	−44	32	51.69
17	6¼			38.640			52.74
				38.662			52.21
							+2.19

No. 108.

1899							
Mar. 10	7½	10	28	13.908	−32	50	57.77
11	7¾			13.768			58.03
				13.838			57.90
							+.32

No. 111.

1899							
Apr. 7		10	29	12.570	−23	13	29.00
10				12.608			29.13
				12.589			29.06
							+.11
Obs. Lat. 303					37	20	25.98
Red. Lat.							25.76
							−.35

No. 113.

1899							
Apr. 3	6	10	28	41.124	−46	29	2.65
4	5½			41.162			3.85
				41.143			3.25
							+3.52

No. 115.

1899							
Apr. 14	8½	10	30	3.211	−33	14	35.30
17	8½			3.265			35.23
				3.238			35.27
							+.33

No. 118.

1899							
Mar. 6	6	10	31	20.749	−15	49	16.56
7	6			20.766			16.13
				20.757			16.34
							+.03

No. 120.

1899							
Mar. 10	6½	10	31	57.948	−27	7	59.30
11	6½			57.956			58.66
				57.952			58.98
							+.18

No. 123.

1899	Mag.	h	m	s	°	′	″
Apr. 3	5½	10	32	29.319	−26	53	21.11
4	5			29.291			20.83
				29.305			20.97
							+.17

No. 127.

1899							
Apr. 5		10	33	39.616	−16	21	7.86
6				.671			7.86
7				.612			7.20
10				.655			7.58
12				.618			7.96
13				.646			7.81
				39.636			7.71
							+.03
Obs. Lat. 303					37	20	25.69
Red. Lat.							25.46
							−.27

No. 130.

1899							
Mar. 6	7¼	10	34	13.146	−17	3	3.24
7	7¼			13.194			2.08
				13.170			2.66
							+.04

No. 134.

1899							
Mar. 10		10	36	15.928	−1	12	38.16
11				.918			38.09
Apr. 18				.823			38.46
19				.856			38.51
				15.881			38.30
							−.08
Obs. Lat. B. J.					37	20	26.07
Red. Lat.							25.88
							−.16

No. 143.

1899							
Mar. 6	6	10	38	2.234	−32	11	13.52
7	6			2.313			13.06
				2.273			13.29
							+.30

No. 151.

1899							
Apr. 5	7	10	40	19.169	−29	9	11.73
6	7			19.161			11.67
				19.165			11.70
							+.22

No. 155.

1899							
Apr. 3	6	10	41	55.196	−16	45	50.90
4	6			55.237			50.86
				55.216			50.88
							+.04

No. 156.

1899							
Mar. 6	6½	10	42	0.327	−15	11	59.47
7	6¾			0.394			58.36
				0.360			58.91
							+.02

No. 158.

1899	Mag.	h	m	s	°	′	″
Apr. 12	6	10	42	7.512	−42	39	34.91
13	6½			7.433			34.52
				7.472			34.71
							+1.38

No. 159.

1899							
Mar. 10	7	10	42	38.693	−15	5	34.61
11	7½			38.709			34.95
				38.701			34.78
							+.02

No. 165.

1899							
Apr. 6	6¾	10	43	54.143	−8	33	56.42
18	7			54.168			56.35
				54.156			56.38
							−.03

Anon.

1899							
Apr. 5	7	10	43	54.977	−7	38	8.04
							−.04

No. 166.

1899							
Apr. 7	7	10	44	9.965	−3	29	23.64
10	7			9.936			23.26
				9.950			23.45
							−.07

No. 167.

1899							
Apr. 14		10	44	38.454	−15	39	54.46
17				38.453			53.88
				38.453			54.17
							+.03
Obs. Lat. B. J.					37	20	25.17
Red. Lat.							24.93
							−.27

No. 168.

1899							
Mar. 6	7	10	45	9.642	−8	27	17.51
7	6½			9.694			16.74
				9.668			17.12
							−.03

No. 169.

1899							
Apr. 12		10	45	13.998	−8	21	44.95
13				13.990			45.68
				13.994			45.32
							−.03
Obs. Lat. 303					37	20	26.20
Red. Lat.							25.96
							−.21

No. 173.

1899							
Apr. 3	6	10	45	15.042	−33	31	26.42
4	6			15.103			26.22
				15.072			26.32
							+.34

No. 174.

1899	Mag.	h	m	s	°	′	″
Apr. 7	7½	10	45	53.051	−8	21	6.92
10	7½			53.012			7.21
				53.031			7.06
							−.03

No. 175.

1899	Mag.	h	m	s	°	′	″
Mar. 10	7	10	45	44.119	−33	18	15.54
11	7			44.111			16.20
				44.115			15.87
							+.33

No. 176.

1899	Mag.	h	m	s	°	′	″
Apr. 14	7	10	46	9.322	−17	47	49.45
17	7			9.297			48.98
				9.310			49.21
							+.05

No. 178.

1899	Mag.	h	m	s	°	′	″
Apr. 5	6½	10	46	34.43	−8	19	51.07
6	7			.401			49.28
7	7			.394			. .
				34.408			50.17
							−.04

No. 183.

1899	Mag.	h	m	s	°	′	″
Mar. 6		10	48	32.979	−19	35	41.86
7				32.999			. .
Apr. 3				33.003			41.35
4				33.003			41.39
				32.996			41.53
							+.07
Obs. Lat. 303					37	20	25.69
Red. Lat.							25.50
							−.31

No. 189.

1899	Mag.	h	m	s	°	′	″
Mar. 10	7	10	49	32.446	−19	41	46.85
11	7			32.457			46.88
				32.451			46.87
							+.07

No. 199.

1899	Mag.	h	m	s	°	′	″
Mar. 6	5½	10	52	0.580	−36	35	41.87
7	5			0.703			40.11
				0.641			40.99
							+.45

No. 208.

1899	Mag.	h	m	s	°	′	″
Mar. 10	6	10	54	27.692	−33	11	42.21
11	5½			27.636			41.39
				27.664			41.80
							+.33

No. 209.

1899	Mag.	h	m	s	°	′	″
Apr. 3	4	10	54	51.218	−17	45	39.12
4	4			51.186			38.93
				51.202			39.02
							+.05

No. 215.

1899	Mag.	h	m	s	°	′	″
Apr. 5	5	10	55	31.307	−41	41	3.99
6	6			31.145			3.56
				31.226			3.77
							+1.07

No. 216.

1899	Mag.	h	m	s	°	′	″
Mar. 6	6	10	55	53.024	−31	18	1.38
7	6			53.136			0.91
				53.080			1.14
							+.27

No. 218.

1899	h	m	s	°	′	″
Apr. 7	10	56	40.600	−1	56	27.25
10			.486			26.30
12			.531			26.34
13			.555			26.81
14			.518			26.48
17			.475			26.45
			40.527			26.61
						−.08
Obs. Lat. 303				37	20	25.33
Red. Lat.						25.09
						−.16

No. 222.

1899	Mag.	h	m	s	°	′	″
Mar. 10	6	10	57	30.980	−26	17	5.62
11	6			31.018			5.49
				30.999			5.55
							+.16

No. 223.

1899	Mag.	h	m	s	°	′	″
Apr. 3	7	10	57	49.185	−2	5	30.11
4	7			49.164			30.31
				49.174			30.21
							−.08

No. 232.

1899	Mag.	h	m	s	°	′	″
Apr. 5	6½	10	59	9.375	−0	44	1.51
6	6			9.283			1.23
				9.329			1.37
							−.08

No. 233.

1899	Mag.	h	m	s	°	′	″
Mar. 6	7½	10	59	35.208	−1	58	5.69
7	7½			35.171			4.73
				35.190			5.21
							−.08

No. 237.

1899	Mag.	h	m	s	°	′	″
Apr. 12	5	11	0	27.894	−26	44	54.80
13	5			27.931			55.37
				27.912			55.08
							+.17

No. 240.

1899	Mag.	h	m	s	°	′	″
Apr. 3	6	11	1	3.694	−26	44	31.84
4				3.574			31.11
				3.634			31.47
							+.17

No. 248.

1899	Mag.	h	m	s	°	′	″
Apr. 7	5½	11	2	36.249	−42	5	38.64
10	6			36.379			37.04
				36.314			37.84
							+1.20

No. 250.

1899	Mag.	h	m	s	°	′	″
Apr. 18	6¾	11	3	7.314	−1	21	22.05
19	6½			7.355			21.91
				7.334			21.98
							−.08

No. 255.

1899	Mag.	h	m	s	°	′	″
Apr. 14	6¾	11	4	4.239	−0	47	9.18
17				4.247			8.74
				4.243			8.96
							−.08

No. 256.

1899	Mag.	h	m	s	°	′	″
Apr. 12	5½	11	3	50.614	−27	31	58.71
13	6			50.680			59.67
				50.647			59.19
							+.19

No. 2.

1899	Mag.	h	m	s	°	′	″
Apr. 18	6	11	5	2.022	−31	49	10.85
19	6			2.060			8.91
				2.041			9.88
							+.28

No. 3.

1899	Mag.	h	m	s	°	′	″
Apr. 7	7	11	5	43.765	−32	0	57.20
10	7			43.871			57.33
				43.818			57.26
							+.29

No. 6.

1899	Mag.	h	m	s	°	′	″
Apr. 12		11	6	41.375	−22	16	28.03
13				41.385			28.10
				41.380			28.07
							+.10
Obs. Lat. B. J.					37	20	25.77
Red. Lat.							25.53
							−.34

No. 16.

1899	Mag.	h	m	s	°	′	″
Apr. 3	7	11	9	8.817	−16	20	14.64
4	6¾			8.825			14.23
				8.821			14.43
							+.03

No. 23.

1899	Mag.	h	m	s	°	′	″
Apr. 5		11	11	31.573	−3	5	57.55
6				.568			58.01
18				.602			57.82
19				.562			58.03
				31.576			57.85
							−.07
Obs. Lat. 303					37	20	25.74
Red. Lat.							25.51
							−.17

No. 32.

1899	Mag.	h	m	s	°	′	″
Apr. 3	7	11	13	8.324	−4	30	40.17
4	7½			8.413			39.96
				8.368			40.06
							−.06

No. 35.

1899							
Apr. 7	7	11	13	37.707	−23	47	29.62
10	6½			37.800			29.57
				37.753			29.59
							+.12

No. 38.

1899							
Apr. 14		11	14	17.439	−14	13	54.47
17				.394			54.79
20				.395			54.65
28				.424			54.51
29				.352			54.90
May 2				.416			54.54
4				.365			54.42
5				.362			54.30
				17.393			54.57
							+.01
Obs. Lat. B. J.					37	20	25.20
Red. Lat.							24.95
							−.25

No. 39.

1899							
Apr. 12	9	11	14	36.730	−6	20	41.79
13	9			36.702			41.77
				36.716			41.78
							−.05

1899							
Apr. 6	8	11	14	37.121	−6	20	46.95
19	8¾			37.024			47.59
				37.072			47.27
							−.05

No. 49.

1899							
Apr. 18	7	11	17	55.587	−20	4	18.08
19	7			55.606			18.96
				55.596			18.52
							+.07

No. 51.

1899							
Apr. 7	7	11	17	55.317	−35	41	18.73
10	7			55.298			18.32
				55.307			18.52
							+.42

No. 53.

1899							
Apr. 3	5½	11	18	21.382	−18	13	29.32
4	5½			21.421			29.47
				21.401			29.39
							+.05

No. 55.

1899							
Apr. 5	5	11	18	19.128	−35	36	38.37
6	5			19.132			38.75
				19.130			38.56
							+.41

No. 57.

1899	Mag.	h	m	s	°	′	″
Apr. 12	7	11	18	53.692	−35	32	5.59
13	7			53.677			4.95
				53.684			5.27
							+.41

No. 58.

1899							
Apr. 14	5½	11	19	30.464	−10	18	19.00
17				30.469			19.29
				30.466			19.14
							−.02

No. 62.

1899							
Apr. 20		11	19	50.074	−17	7	45.16
28				.052			45.58
29				.078			44.91
May 5				.104			45.50
				50.077			45.29
							+.04
Obs. Lat. B. J.					37	20	25.67
Red. Lat.							25.41
							−.28

No. 68.

1899							
Apr. 7	5½	11	20	35.564	−35	30	31.28
10	5			35.581			32.13
				35.572			31.71
							+.41

No. 72.

1899							
Apr. 3		11	22	4.222	−11	48	5.88
4				4.249			5.91
				4.235			5.90
							−.01
Obs. Lat. 303					37	20	25.93
Red. Lat.							25.71
							−.23

No. 73.

1899							
Apr. 5	7	11	22	24.852	−11	52	43.11
6	7			24.915			43.14
				24.883			43.12
							−.01

No. 77.

1899							
Apr. 20	6½	11	22	43.945	−1	8	38.30
28	6			43.979			38.39
				43.962			38.35
							−.08

No. 81.

1899							
Apr. 18	6	11	23	43.138	−42	7	9.16
19	6			43.085			9.47
				43.111			9.31
							+1.21

No. 89.

1899	Mag.	h	m	s	°	′	″
May 2		11	25	9.199	−2	26	46.65
4				9.213			46.43
				9.206			46.54
							−.07
Obs. Lat. 303					37	20	26.43
Red. Lat.							26.18
							−.17

No. 91.

1899							
Apr. 5	7½	11	25	42.490	−6	9	43.49
6	7½			42.469			43.03
				42.480			43.26
							−.05

No. 94.

1899							
Apr. 7	6½	11	26	48.309	−5	54	39.34
10	6½			48.344			38.89
				48.326			39.11
							−.05

No. 95.

1899							
Apr. 29	6½	11	27	15.627	−28	42	35.09
May 5	6½			15.626			34.56
				15.626			34.82
							+.21

No. 96.

1899							
Apr. 18	6	11	27	15.991	−28	42	28.41
19	6			15.906			27.97
				15.948			28.19
							+.21

No. 97.

1899							
Apr. 20	8	11	27	28.387	−30	24	50.14
28	8			28.380			50.90
				28.383			50.52
							+.25

No. 98.

1899							
May 2	6	11	27	39.482	−7	16	11.29
4	6			39.476			11.91
				39.479			11.60
							−.04

No. 99.

1899							
Apr. 14	5	11	27	54.319	−30	31	47.15
17				54.294			48.02
				54.306			47.58
							+.25

No. 101.

1899							
Apr. 12	6	11	27	53.049	−39	52	49.03
13	6			53.009			49.24
				53.029			49.13
							+.64

No. 103.

1899	Mag.	h	m	s	°	′	″
Apr. 7		11	28	1.940	−31	17	56.06
10				1.907			56.10
				1.923			56.08
							+.27
Obs. Lat. B. J.					37	20	25.42
Red. Lat.							25.19
							−.51

No. 104.

Apr. 5	7½	11	28	29.421	−5	58	44.89
6	7½			29.435			44.83
				29.428			44.86
							−.05

No. 105.

Apr. 29	6	11	28	41.907	−40	1	45.97
May 5	6			41.887			46.68
				41.897			46.32
							+.66

No. 108.

Apr. 3	7	11	29	13.148	−4	58	9.68
4	7			13.127			9.50
				13.137			9.59
							−.06

No. 110.

Apr. 18	6	11	29	34.993	−32	17	48.51
19	6			34.945			45.98
				34.969			47.25
							+.30

No. 112.

Apr. 20	8	11	30	48.937	−34	13	40.54
28	8			48.973			41.41
				48.955			40.97
							+.36

No. 114.

May 2		11	31	32.478	−9	14	36.59
4				32.450			37.47
				32.464			37.03
							−.03
Obs. Lat. 303					37	20	26.04
Red. Lat.							25.78
							−.21

No. 115.

Apr. 5	6½	11	31	34.277	−33	0	36.32
6	6½			34.299			38.14
				34.288			37.23
							+.32

No. 117.

Apr. 12	8	11	31	39.219	−34	5	28.82
13	7½			39.188			28.15
				39.203			28.48
							+.36

No. 118.

1899	Mag.	h	m	s	°	′	″
Apr. 14	6	11	31	56.073	−22	23	26.90
17				56.062			27.15
				56.067			27.03
							+.10

No. 120.

Apr. 7	6	11	32	0.516	−32	25	37.90
10	6			0.551			37.28
				0.533			37.59
							+.30

No. 124.

Apr. 3	6½	11	32	45.570	−30	39	27.87
4	6½			45.559			27.44
				45.564			27.65
							+.25

No. 126.

Apr. 18	6½	11	33	14.419	−1	52	37.29
19	6½			14.442			37.68
				14.430			37.48
							−.08

No. 127.

Apr. 29	7½	11	33	20.309	−33	2	47.53
May 5	7½			20.261			47.25
				20.285			47.39
							+.32

No. 128.

Apr. 20	5½	11	33	32.242	−12	38	45 04
28	5½			32.211			45.51
				32.226			45.27
							.00

No. 130.

Apr. 12	6¾	11	34	22.224	−12	37	14.80
13	6¾			22.277			14.79
				22.250			14.79
							.00

No. 131.

Apr. 5	7½	11	34	44.340	−34	25	19.34
6	7½			44.290			20.40
				44.315			19.87
							+.37

No. 133.

Apr. 7	5½	11	35	11.738	−34	11	5.21
10	5½			11.733			5.85
				11.736			5.53
							+.36

No. 136.

Apr. 3	7	11	36	4.126	−16	7	21.00
4	7			4.133			20.73
				4.130			20.86
							+.03

No. 141.

1899	Mag.	h	m	s	°	′	″
Apr. 14	5½	11	36	41.248	−31	56	18.39
17				41.238			19.20
				41.243			18.79
							+.29

No. 142.

Apr. 18	8½	11	36	43.837	−22	5	33.01
19	8½			43.792			34.99
				43.814			34.00
							+.10

No. 143.

Apr. 20	8½	11	36	44.962	−31	55	30.02
28	8½			44.966			30.78
				44.964			30.40
							+.29

No. 145.

May 2	6½	11	36	57.540	−19	43	56.71
4	6½			57.643			56.72
				57.591			56.71
							+.07

No. 148.

Apr. 5	6	11	38	45.553	−6	6	55.96
6	5½			45.525			55.98
				45.539			55.97
							−.05

No. 150.

Apr. 3		11	39	38.582	−17	47	20.90
4				.578			21.06
18				.568			20.57
19				.533			20.72
29				.606			21.35
May 5				.521			21.16
				38.565			20.96
							+.05
Obs. Lat. 303					37	20	26.03
Red. Lat.							25.80
							−.29

No. 154.

Apr. 10	6	11	40	44.020	−45	7	47.32
12	6			44.063			47.44
13				43.960			47.37
				44.014			47.38
							+2.52

Lac. 4889.

Apr. 14	6	11	41	42.026	−39	57	2.80
17				42.117			4.04
				42.071			3.42
							+.65

No. 161.

Apr. 3	5½	11	43	38.946	−26	11	16.50
4	5½			39.032			17.85
				38.989			17.17
							+.16

No. 167.

1899	Mag.	h	m	s	°	′	″
Apr. 5	5½	11	45	52.439	−4	46	18.11
6	5½			52.383			18 84
				52.411			18.47
							−.06

No. 168.

1899							
Apr. 7	5½	11	46	5.656	−44	36	44.38
10	5½			5.688			44.92
				5.672			44.65
							+2.22

No. 172.

1899							
Apr. 3	5	11	47	48.311	−33	20	46.07
4	5			48.374			46.99
				48.342			46.53
							+.33

No. 173.

1899							
Apr. 14	8½	11	48	17.439	−3	19	18.18
17				17.418			18.60
				17.428			18.39
							−.07

No. 175.

1899							
Apr. 12	6	11	48	20.746	−34	30	16.03
13	6			20.758			14.24
				20.752			15.13
							+.37

No. 179.

1899							
Apr. 5	7½	11	48	42.156	−3	12	49.43
6	7			42.138			49.59
				42.147			49.51
							−.07

No. 182.

1899							
Apr. 7	7½	11	49	40.685	−0	52	50.66
10	7½			40.737			50.62
				40.711			50.64
							−.08

No. 188.

1899							
Apr. 18	7½	11	50	16.503	−4	34	19.66
19	7½			16.462			19.95
				16.482			19.81
							−.06

No. 191.

1899							
Apr. 3	6	11	50	31.881	−27	54	50.59
4	6			31.856			50.72
				31.868			50.65
							+.19

No. 193.

1899							
Apr. 12		11	50	52.046	−16	35	18.54
13				.055			18.54
14				.087			17.75
17				.056			18.87
				52.061			18.43
							+.03
Obs. Lat. 303					37	20	25.52
Red. Lat.							25.28
							−.27

No. 206.

1899	Mag.	h	m	s	°	′	″
Apr. 5	7½	11	53	37.027	−14	18	6.73
6	6½			37.068			6.74
				37.047			6.73
							+.01

No. 212.

1899							
Apr. 3	5¾	11	55	41.154	−19	5	49.03
4				41.198			48.23
				41.176			48.63
							+.06

No. 213.

1899							
Apr. 7	6½	11	55	51.447	−1	12	13.41
10	6½			51.475			13.20
				51.461			13.31
							−.08

No. 219.

1899							
Apr. 5	7¾	11	57	49.618	−21	35	25.81
6	7½			49.604			25.56
				49.611			25.68
							+.09

No. 220.

1899							
Apr. 12	5½	11	58	25.643	−41	52	6.69
13	5½			25.679			8.72
				25.661			7.71
							+1.13

No. 221.

1899							
Apr. 19	6½	11	58	25.366	−4	55	0.99
20	7			25.406			0.79
				25.386			0.89
							−.06

No. 225.

1899							
Apr. 7	7½	11	59	6.359	−20	28	34.75
10	7½			6.424			34.97
				6.391			34.86
							+.08

No. 230.

1899							
Apr. 5		12	0	49.497	−2	34	7.40
6				49.468			7.23
				49.482			7.31
							−.07
Obs. Lat. 303					37	20	25.74
Red. Lat.							25.52
							−.17

No. 230.

1900							
Apr. 17		12	0	52.517	−2	34	27.82
18				.526			27.81
27				.512			28.07
May 7				.506			27.59
				52.515			27.82
							−.07
Obs. Lat. 303					37	20	26.36
Red. Lat.							26.24
							−.17

No. 231.

1899	Mag.	h	m	s	°	′	″
May 2	7	12	1	5.229	−22	14	4.36
4	7½			5.277			4.22
				5.253			4.29
							+.10

No. 234.

1900							
Apr. 9	7	12	1	53.571	−23	12	37.84
16	7			53.618			38.42
				53.594			38.13
							+.11

No. 237.

1899							
Apr. 18	7	12	2	4.361	−6	12	13.21
19	7			4.391			13.74
				4.376			13.47
							−.05

No. 240.

1899							
Apr. 12	7	12	3	7.195	−34	6	46.75
13	6½			7.249			45.53
				7.222			46.14
							+.36

No. 241.

1899							
Apr. 14	4	12	3	12.065	−24	9	56.18
17				12.174			57.19
				12.120			56.68
							+.13

No. 243.

1899							
Apr. 7	6	12	3	40.269	−43	45	48.33
10	6			40.264			47.86
				40.266			48.09
							+1.81

No. 247.

1899							
May 2	6	12	4	49.579	−34	8	33.14
4	6½			49.507			33.14
				49.543			33.14
							+.36

No. 248.

1899							
Apr. 20		12	4	55.723	−22	3	29.04
28				55.715			29.46
				55.719			29.25
							+.10
Obs. Lat. B. J.					37	20	25.80
Red. Lat.							25.55
							−.34

No. 248.

1900							
May 8		12	4	58.726	−22	3	48.71
14				58.795			48.71
				58.760			48.71
							+.10
Obs. Lat. B. J.					37	20	25.23
Red. Lat.							25.09
							−.34

No. 1.

1899	Mag.	h	m	s	°	′	″
Apr. 18	7	12	5	16.142	−24	23	48.63
19	7¼			16.143			49.35
				16.142			48.99
							+.13

No. 4.

1900							
Apr. 9	6	12	5	54.846	−23	2	43.93
16	6			54.878			43.50
				54.862			43.72
							+.11

No. 5.

1900							
Apr. 17	7½	12	6	31.663	−30	2	50.12
18	7½			31.691			50.02
				31.677			50.07
							+.24

No. 14.

1899							
May 2	7¾	12	8	24.284	−21	4	22.53
4	7¾			24.296			22.32
				24.290			22.43
							+.08

No. 15.

1900							
Apr. 27	5½	12	8	48.914	−45	10	5.60
May 7	6			48.808			6.91
				48.861			6.26
							+2.54

No. 17.

1899							
Apr. 18	6½	12	9	4.921	−5	9	29.24
19	6½			4.919			29.22
				4.920			29 23
							−.06

No. 18.

1900							
Apr. 17	6½	12	9	49.475	−20	17	17.82
18	6			49.488			18.08
				49.481			17.95
							+.08

No. 21.

1900							
May 8	7½	12	10	21.408	−13	30	57.39
14	7½			21.434			56.55
				21.421			56.97
							+.01

No. 24.

1900							
Apr. 9		12	10	39.699	−16	59	11.11
16				39.662			11.44
				39.680			11.27
							+.04
Obs. Lat. B. J.					37	20	24.72
Red. Lat.							24.62
							−.28

No. 25.

1900							
Apr. 27	7	12	10	40.764	−13	15	37.99
May 7	7			40.776			38.68
				40.770			38.34
							.00

No. 32.

1899	Mag.	h	m	s	°	′	″
Apr. 20	6¾	12	12	58.216	−3	23	36.71
28	6¾			58.207			37.01
				58.211			36.86
							−.07

No. 33.

1899							
Apr. 18	6½	12	12	58.629	−3	23	17.32
19	6			58.641			17.43
				58.635			17.37
							−.07

No. 35.

1899							
May 2	7½	12	13	20.472	−8	20	28.32
4	7½			20.487			28.14
				20.480			28.23
1900				+3.084			−20.02
Apr. 9	6½			23.524			48.58
							−.04

No. 41.

1900							
Apr. 16	6½	12	14	11.324	−8	21	31.81
May 15	6½			.348			30.28
16	6½			.358			31.56
				11.343			31.22
							−.04

No. 47.

1900							
Apr. 17	6	12	14	59.995	−21	37	11.34
18	6			60.021			11.23
			15	0.008			11.29
							+.09

No. 51.

1900							
Apr. 27	5	12	15	22.763	−21	39	35.79
May 7	6			22.813			36.15
				22.788			35.97
							+.09

No. 54.

1900							
May 8		12	15	45.858	−13	0	39.88
14				.857			39.54
15				.838			39.49
				45.851			39.64
							.00
Obs. Lat. 303					37	20	26.20
Red. Lat.							26.06
							−.24

No. 61.

1899							
Apr. 18	6½	12	17	44.613	−24	18	44.81
19	6			44.572			44.50
				44.592			44.65
							+.13

No. 63.

1899							
Apr. 20	7	12	17	57.782	−6	44	20.71
28	6¾			57.742			21.37
				57.762			21.04
							−.05

No. 64.

1899	Mag.	h	m	s	°	′	″
May 2	5	12	18	5.717	−24	16	48.51
4	5			5.737			48.64
				5.727			48.57
							+.13

No. 65.

1900							
Apr. 9	6½	12	18	6.859	−4	25	8.80
16	6½			6.750			9.78
				6.804			9.29
							−.06

No. 66.

1900							
Apr. 17	6	12	18	19.774	−34	51	29.18
18	6			19.810			29.31
				19.792			29.24
							+.38

No. 69.

1900							
Apr. 27	7	12	19	12.100	−9	55	20.11
May 7	7¼			12.137			19.41
				12.118			19.76
							−.02

No. 74.

1900							
May 8	6	12	20	5.452	−34	37	55.57
14	6			5.506			56.54
				5.479			56.06
							+.37

No. 80.

1899							
Apr. 18	6	12	21	32.258	−32	16	12.68
19	5¾			32.279			13.77
				32.268			13.22
							+.30

No. 82.

1899							
Apr. 20	8½	12	22	2.935	−32	13	5.11
28	8½			2.927			4.05
				2.931			4.58
							+.30

No. 87.

1899							
May 2	6	12	22	34.783	−16	4	22.48
4	6½			34.776			22.62
				34.780			22.55
							+.03

No. 89.

1900							
Apr. 9	7½	12	22	38.966	−1	49	38.11
16	7½			38.987			38.41
				38.976			38.26
							−.08

No. 91.

1900							
Apr. 17		12	22	43.648	−4	3	42.84
18				.661			42.92
May 15				.684			42.30
16				.631			42.89
				43.656			42.74
							−.06
Obs. Lat. 303					37	20	25.46
Red. Lat.							25.34
							−.18

No. 92.

1900	Mag.	h	m	s	°	′	″
May 8	6	12	23	3.303	−38	29	14.42
14	6			3.390			14.09
				3.346			14.26
							+.55

No. 98.

1900	Mag.	h	m	s	°	′	″
Apr. 27	6½	12	24	1.818	−1	52	34.91
May 7	6½			1.854			34.34
				1.836			34.63
							−.08

No. 101.

1899	Mag.	h	m	s	°	′	″
Apr. 18		12	24	38.201	−15	57	10.86
19				38.245			11.12
				38.223			10.99
							+.03
Obs. Lat. B. J.					37	20	25.41
Red. Lat.							25.17
							−.27

No. 101.

1900	Mag.	h	m	s	°	′	″
May 15		12	24	41.330	−15	57	31.05
16				41.288			31.13
				41.309			31.09
							+.03
Obs. Lat. B. J.					37	20	25.20
Red. Lat.							25.05
							−.27

No. 104.

1900	Mag.	h	m	s	°	′	″
Apr. 17	6½	12	24	55.409	−12	50	20.98
18				55.385			21.34
				55.397			21.16
							.00

No. 105.

1899	Mag.	h	m	s	°	′	″
Apr. 20	6	12	25	0.155	−23	8	17.45
28	6			0.245			17.57
				0.200			17.51
							+.11

No. 108.

1899	Mag.	h	m	s	°	′	″
May 2	6½	12	35	39.181	−3	30	10.70
4	6			39.202			10.12
				39.191			10.41
							−.07

No. 111.

1900	Mag.	h	m	s	°	′	″
Apr. 9	6½	12	26	30.144	−4	30	3.62
16	6¼			30.154			2.83
				30.149			3.23
							−.06

No. 112.

1900	Mag.	h	m	s	°	′	″
May 8	7¾	12	26	36.863	−15	9	43.10
14	7¾			36.853			42.67
				36.858			42.89
							+.02

No. 115.

1900	Mag.	h	m	s	°	′	″
Apr. 27	4	12	26	54.825	−15	38	31.28
May 7	5			54.839			31.53
				54.832			31.40
							+.03

No. 117.

1899	Mag.	h	m	s	°	′	″
Apr. 18	8	12	28	30.050	−22	57	19.80
19	8			29.998			19.24
				30.024			19.52
							+.11

No. 119.

1899	Mag.	h	m	s	°	′	″
Apr. 20	5½	12	28	33.925	−8	53	41.53
28	5½			33.868			40.89
				33.896			41.21
							−.03

No. 121.

1900	Mag.	h	m	s	°	′	″
Apr. 17	7½	12	28	49.717	−22	59	42.36
18	7			49.746			42.14
				49.731			42.25
							+.11

No. 123.

1900	Mag.	h	m	s	°	′	″
Apr. 27		12	29	7.953	−22	50	37.60
May 7				7.929			37.72
				7.941			37.66
							+.11
Obs. Lat. B. J.					37	20	25.65
Red. Lat.							25.52
							−.35

No. 125.

1900	Mag.	h	m	s	°	′	″
May 15	7½	12	29	15.686	−0	51	22.85
16	7½			15.575			23.36
				15.630			23.10
							−.08

No. 131.

1900	Mag.	h	m	s	°	′	″
Apr. 9	6	12	30	22.563	−40	28	15.87
16	6			22.558			16.97
				22.560			16.42
							+.75

No. 134.

1900	Mag.	h	m	s	°	′	″
May 8	9	12	31	20.507	−15	50	4.60
14	9			20.506			4.70
				20.506			4.65
							+.03

No. 136.

1899	Mag.	h	m	s	°	′	″
Apr. 18	6	12	31	35.134	−5	16	30.46
19	5¾			35.061			31.36
				35.097			30.91
							−.06

No. 140.

1899	Mag.	h	m	s	°	′	″
Apr. 20	5½	12	32	20.841	−26	34	49.93
28	5½			20.816			51.66
				20.828			50.79
							+.17

No. 143.

1899	Mag.	h	m	s	°	′	″
May 2	6½	12	33	31.636	−3	49	5.40
4	6			31.665			4.98
				31.650			5.19
							−.07

No. 146.

1900	Mag.	h	m	s	°	′	″
Apr. 9		12	34	5.068	−7	26	42.95
16				5.005			42.98
				5.036			42.96
							−.04
Obs. Lat. 303					37	20	25.89
Red. Lat.							25.80
							−.20

No. 147.

1900	Mag.	h	m	s	°	′	″
May 8	8¾	12	34	12.857	−7	28	50.49
14	8¾			12.937			49.79
				12.897			50.14
							−.04

No. 149.

1900	Mag.	h	m	s	°	′	″
Apr. 17	5½	12	34	27.595	−39	26	14.38
18	5½			27.644			14.64
				27.619			14.51
							+.61

No. 152.

1900	Mag.	h	m	s	°	′	″
Apr. 27	7	12	34	21.084	−5	33	2.77
May 7	7			21.067			3.04
				21.076			2.91
							−.05

No. 153.

1899	Mag.	h	m	s	°	′	″
Apr. 19	5½	12	35	49.966	−45	35	38.46
1900				+3.285			−19.81
May 15	6			53.318			52.95
16	6			53.236			54.55
				53.277			53.75
							+2.82

No. 157*.

1899	Mag.	h	m	s	°	′	″
May 2		12	36	32.278	−0	53	41.14
4				32.317			41.06
				32.297			41.10
							−.08

No. 158*.

1899	Mag.	h	m	s	°	′	″
Apr. 20		12	36	32.516	−0	53	46.65
28				32.505			45.94
				32.510			46.29
							−.08
Obs. Lat. B. J. *mean**					37	20	25.78
Red. Lat.		"					25.53
							−.16

No. 159.

1900	Mag.	h	m	s	°	′	″
Apr. 17	6½	12	36	47.312	−6	57	1.22
18	6½			47.278			1.93
				47.295			1.57
							−.05

No. 168.

1900	Mag.	h	m	s	°	′	″
Apr. 9	6	12	38	40.618	− 27	46	30.17
16	6			40.584			30.97
				40.601			30.57
							+.19

No. 170.

1900							
Apr. 27	6½	12	39	3.113	− 2	17	40.31
May 7	6½			3.215			40.43
				3.164			40.37
							−.07

No. 178.

1899							
Apr. 20	7½	12	41	45.604	− 7	14	47.29
28	7½			45.626			47.86
				45.615			47.57
							−.04

No. 183.

1899							
May 2		12	42	20.165	− 5	44	56.88
4				20.163			56.51
				20.164			56.69
							−.05
Obs. Lat. 303					37	20	26.38
Red. Lat.							26.12
							−.19

No. 183.

1900							
Apr. 9		12	42	23.268	− 5	45	16.57
16				.260			16.14
May 8				.302			16.41
14				.231			15.54
				23.265			16.16
							−.05
Obs. Lat. 303					37	20	25.82
Red. Lat.							25.70
							−.19

No. 193.

1899							
Apr. 18	6¾	12	44	52.770	− 7	4	55.47
19	7			52.783			55.99
				52.776			55.73
							−.04

No. 194.

1899							
Apr. 20	5	12	45	12.237	− 33	26	55.51
28	5			12.308			54.76
				12.272			55.13
							+.33

No. 196.

1899							
May 2	6½	12	46	7.499	− 9	47	18.70
4	6			7.557			18.15
				7.528			18.43
							−.02

No. 197.

1900							
Apr. 17	6½	12	46	29.772	− 34	32	18.73
18	6½			29.777			18.89
				29.774			18.81
							+.37

No. 205.

1900	Mag.	h	m	s	°	′	″
Apr. 27	5	12	47	53.773	− 39	38	9.11
May 7	5			53.676			7.05
				53.724			8.08
							+.62

No. 207.

1900							
May 8	8	12	47	54.577	− 14	25	23.15
14	8			54.592			22.91
				54.584			23.03
							+.01

No. 208.

1900							
Apr. 9	6	12	48	3.820	− 3	0	35.50
16	6½			3.895			35.52
				3.857			35.51
							−.07

No. 210.

1899							
Apr. 20	7	12	48	21.769	− 8	30	52.51
28	7			21.827			51.74
				21.798			52.12
							−.03

No. 214.

1900							
Apr. 17		12	49	9.087	− 8	59	44.80
18				9.065			45.01
				9.076			44.91
							−.03
Obs. Lat. 303					37	20	25.70
Red. Lat.							25.60
							−.21

No. 215.

1900							
Apr. 27	7½	12	49	32.462	− 41	44	56.35
May 7	7½			32.398			55.62
				32.430			55.98
							+1.09

No. 216.

1899							
May 2	8¼	12	49	12.489	− 7	4	41.02
4	8			12.506			41.47
				12.497			41.25
							−.04

No. 218.

1900							
May 8	5½	12	49	44.492	− 42	22	23.00
14	5½			44.520			25.17
				44.506			24.09
							+1.29

Lac. 5319.

1899							
Apr. 18		12	49	20.956	− 43	35	56.46
19	6			20.824			54.37
				20.890			55.41
							+1.74

No. 219.

1900							
Apr. 9	7	12	50	13.453	− 3	57	49.90
16	7			13.500			50.12
				13.476			50.01
							−.06

No. 225.

1899	Mag.	h	m	s	°	′	″
Apr. 20	7½	12	51	47.386	− 21	37	29.44
28	7			47.402			29.92
				47.394			29.68
							+.09

No. 229.

1900							
Apr. 17	7	12	52	49.837	− 22	30	51.54
18	7			49.892			51.51
				49.864			51.53
							+.10

No. 233.

1900							
Apr. 27	8½	12	53	24.278	− 32	51	0.40
May 7	8			24.294			0.58
				24.286			0.49
							+.32

No. 234.

1900							
Apr. 9		12	53	37.592	− 21	0	21.34
16	6½			37.646			21.99
				37.619			21.66
							+.08

No. 237.

1899							
May 2	6	12	54	27.262	− 3	16	1.39
4	6			27.283			1.73
				27.272			1.56
							−.07

No. 238.

1899							
Apr. 18		12	55	0.782	− 32	57	29.43
19	5½			0.811			31.67
				0.796			30.55
							+.32

No. 239.

1899							
Apr. 20	6¾	12	55	30.482	− 33	4	43.88
28	6¾			30.532			42.67
				30.507			43.27
							+.32

No. 240.

1900							
Apr. 17		12	55	36.479	− 32	56	25.15
18	7½			36.544			24.81
				36.511			24.98
							+.35

No. 241.

1900							
May 8	6½	12	55	26.930	− 2	49	51.05
14	6½			26.904			50.72
				26.917			50.89
							−.07

No. 247.

1899							
May 2	8	12	57	28.042	− 33	44	57.61
14	8			28.047			56.95
				28.044			57.28
							+.34

No. 251.

1899	Mag.	h	m	s	°	′	″
Apr. 18		12	58	11.681	−33	42	27.00
19	6½			11.677			28.64
				11.679			27.82
							+.34

No. 254.

1899							
Apr. 20	6	12	58	42.093	−3	7	11.12
28	6½			42.097			11.15
				42.095			11.13
							−.07

No. 259.

1900							
Apr. 9	8½	13	0	9.355	−7	36	46.08
16	8½			9.337			46.49
				9.346			46.29
							−.04

No. 262.

1900							
Apr. 27	6½	13	1	10.306	−14	22	52.07
May 7	6½			10.278			51.43
				10.292			51.75
							+.01

No. 263.

1900							
May 8	7½	13	1	25.954	−33	35	4.07
14	7½			25.913			2.75
				25.933			3.41
							+.34

No. 271.

1899							
Apr. 18	8	13	1	57.323	−5	32	29.31
19	7¾			57.325			29.49
				57.324			29.40
							−.05

No. 272.

1900							
Apr. 17	6	13	2	39.378	−10	12	20.70
18	5½			39.374			20.43
				39.376			20.56
							−.02

No. 274.

1900							
Apr. 9	7	13	3	16.886	−22	34	16.75
16	7			16.911			17.19
				16.898			16.97
							+.11

No. 276.

1899							
May 2	4	13	3	36.782	−22	34	41.08
4	4½			36.856			41.28
				36.819			41.18
							+.11

No. 277.

1900							
May 15	8	13	3	41.588	−12	54	26.26
16	7¾			41.569			27.16
				41.578			26.71
							.00

No. 280.

1900	Mag.	h	m	s	°	′	″
Apr. 27	6	13	4	31.185	−9	47	45.25
May 7	6			31.148			45.02
				31.166			45.14
							−.02

No. 281.

1899							
Apr. 7		13	4	43.151	−4	59	59.47
10				.154			59.49
12				.186			58.89
13				.166			59.31
14				.145			59.03
17				.098			59.63
				43.150			59.30
							−.06
Obs. Lat. B. J.						37	20 25.53
Red. Lat.							25.29
							−.18

No. 281.

1900							
May 8		13	4	46.300	−5	0	18.32
14				.225			18.51
21				.217			18.06
22				.221			18.46
				46.241			18.34
							−.06
Obs. Lat. B. J.						37	20 25.59
Red. Lat.							25.44
							−.18

No. 1.

1900							
Apr. 17	5½	13	5	40.096	−42	50	11.74
18	6			40.043			11.22
				40.070			11.48
							+1.44

No. 3.

1899							
Apr. 18	7¾	13	5	33.189	−9	33	54.80
19	7¾			33.120			55.35
				33.154			55.07
							−.03

No. 7.

1900							
Apr. 9	5½	13	6	28.531	−37	16	22.56
16	5½			28.463			22.96
				28.497			22.76
							+.49

No. 9.

1899							
Apr. 20		13	6	40.946	−15	39	13.66
28				40.965			13.26
				40.955			13.46
							+.03
Obs. Lat. 303						37	20 25.53
Red. Lat.							25.28
							−.27

No. 9.

1900	Mag.	h	m	s	°	′	″
May 17		13	6	44.070	−15	39	32.90
18				44.082			32.52
				44.076			32.71
							+.03
Obs. Lat. 303						37	20 25.31
Red. Lat.							25.16
							−.27

No. 17. S. pr.

1899							
May 2	7	13	8	2.765	−18	17	25.03
4	7			2.827			25.12
				2.796			25.07
							+.05

No. 17. N. fol.

1900							
May 8	7½	13	8	6.215	−18	17	40.14
14	7½			6.271			40.11
				6.243			40.12
							+.05

No. 19.

1900							
Apr. 27	7½	13	8	5.223	−12	56	21.03
May 7	7½			5.286			20.90
				5.254			20.97
							.00

No. 20.

1900							
Apr. 17	5½	13	8	49.672	−19	24	20.02
18	5½			49.701			19.47
				49.686			19.74
							+.06

No. 23.

1900							
May 15	7½	13	9	30.504	−9	50	21.89
16	7			30.517			22.94
				30.510			22.41
							−.02

No. 25.

1899							
Apr. 18	7	13	9	38.502	−10	49	33.35
19	6½			38.527			33.50
				38.514			33.42
							−.02

No. 26.

1900							
Apr. 9	8	13	9	45.368	−10	49	8.18
16	8¼			45.478			8.41
				45.423			8.30
							−.02

No. 28.

1899							
Apr. 20	7¾	13	10	14.231	−7	31	21.17
28	7½			14.218			20.75
				14.224			20.96
							−.04

No. 29.

1900							
Apr. 17	6	13	10	34.131	−19	24	41.20
18	6			34.188			40.83
				34.160			41.02
							+.06

No. 31.

1899	Mag.	h	m	s	°	′	″
May 2	5½	13	11	16.378	−30	58	17.64
4	5½			16.455			18.59
				16.416			18.11
							+.26

No. 33.

1900							
Apr. 27	7¼	13	11	41.570	−12	37	50.84
May 7	7¼			41.662			50.70
				41.616			50.77
							.00

No. 34.

1900							
May 8	8½	13	11	37.479	−6	24	24.06
14	8½			37.472			24.29
				37.476			24.18
							−.05

No. 38.

1900							
May 17	6½	13	12	12.674	−10	1	9.39
18	6½			12.701			9.83
				12.687			9.61
							−.02

No. 44.

1900							
Apr. 9	5	13	13	10.305	−17	45	18.98
16	5			10.219			18.87
				10.262			18.93
							+.05

No. 45.

1899							
Apr. 18		13	13	25.745	−22	38	20.15
19				25.806			20.00
				25.775			20.07
							+.11
Obs. Lat. B. J.					37	20	25.06
Red. Lat.							24.82
							−.35

No. 45.

1900							
May 24		13	13	29.025	−22	38	38.89
25				28.941			38.97
28				28.975			38.85
29				28.982			38.54
				28.981			38.81
							+.11
Obs. Lat. B. J.					37	20	25.10
Red. Lat.							24.93
							−.35

No. 46.

1899							
Apr. 20	7	13	13	18.314	−5	44	2.04
28	7¼			18.320			2.00
				18.317			2.02
							−.05

No. 47.

1900							
May 21	7½	13	13	42.286	−12	7	18.27
22	7½			42.282			18.03
				42.284			18.15
							−.01

No. 49.

1900	Mag.	h	m	s	°	′	″
Apr. 17	8	13	14	11.140	−10	37	21.83
18	8			11.148			21.39
				11.144			21.61
							−.02

No. 50.

1899							
May 2	7½	13	14	17.235	−11	57	10.23
4	7½			17.310			10.00
				17.272			10.11
							−.01

No. 52.

1900							
May 15	7½	13	14	28.038	−11	8	47.96
16	7½			28.015			48.62
				28.026			48.29
							−.01

No. 53.

1900							
Apr. 27	3	13	14	58.395	−36	11	5.40
May 7	3			58.493			4.46
				58.444			4.93
							+.44

No. 55.

1899							
May 8	7	13	15	4.740	−10	46	43.17
14	7			4.791			43.15
				4.766			43.16
							−.02

No. 56.

1900							
May 17	8	13	15	12.912	−9	39	57.26
18	7¾			12.909			57.06
				12.910			57.16
							−.03

No. 58.

1900							
May 21	7	13	15	57.983	−9	28	33.18
22	7			57.982			32.95
				57.982			33.06
							−.03

No. 59.

1900							
Apr. 9	7	13	16	7.247	−18	57	54.19
16	7			7.260			54.06
				7.253			54.13
							+.06

No. 60.

1899							
Apr. 18	7½	13	16	[15.97]	−11	13	2.54
19	7½			16.069			2.73
							2.64
1900				+3.159			−18.95
May 28	7½			19.233	−11	13	21.11
29	7½			19.215			21.53
				19.224			21.32
							−.01

No. 62.

1899	Mag.	h	m	s	°	′	″
Apr. 20	6½	13	16	47.791	−12	3	1.98
28	6½			47.772			2.44
				47.781			2.21
							−.01

No. 64.

1899							
May 2	8½	13	17	19.549	−17	30	5.05
4	8½			19.555			5.13
				19.552			5.09
							+.04

No. 67.

1900							
Apr. 17	7	13	17	19.285	−5	50	29.99
18	7			19.306			29.60
				19.296			29.80
							−.05

No. 68.

1900							
May 15	6	13	17	39.628	−17	12	40.75
16	6			39.613			42.04
				39.620			41.40
							+.04

No. 70.

1900							
Apr. 27	6	13	18	7.821	−4	24	4.47
May 7	6			7.948			4.85
				7.884			4.66
							−.06

No. 72.

1900							
May 8	7½	13	18	40.767	−10	20	53.30
14	7½			40.811			53.45
				40.789			53.38
							−.02

No. 73.

1899							
Apr. 18	5½	13	19	17.698	−4	38	10.65
19	5½			17.651			10.40
				17.674			10.52
							−.06

No. 74.

1899							
Apr. 20	5½	13	19	16.303	−39	13	41.61
28	5½			16.176			41.88
				16.239			41.75
							+.60

No. 75.

1900							
Apr. 9		13	19	55.343	−10	38	21.97
16				.393			21.54
May 17				.397			21.48
18				.402			21.71
24				.357			21.63
25				.330			22.23
28				.389			22.41
29				.371			21.65
				55.373			21.83
							−.02
Obs. Lat. B. J.					37	20	25.35
Red. Lat.							25.20
							−.22

No. 76.

1900	Mag.	h	m	s	°	′	″
Apr. 17	7	13	20	44.513	−16	20	22.52
18	7			44.550			22.17
				44.531			22.34
							+.03

No. 80.

1900							
Apr. 27	5	13	21	26.092	−12	11	14.23
May 7	5			26.194			14.61
				26.143			14.42
							−.01

No. 81.

1900							
May 21	8	13	21	41.487	−5	24	39.23
22	8			41.535			39.19
				41.511			39.21
							−.06

No. 82.

1900							
May 24	5	13	22	7.047	−15	27	18.31
25	5			7.033			18.05
				7.040			18.18
							+.02

No. 86.

1899							
Apr. 18	7½	13	22	43.200	−21	52	32.63
19	7			43.205			32.35
				43.202			32.49
							+.10

No. 87.

1900							
Apr. 9		13	22	56.895	−24	41	41.09
16	7¾			56.943			41.39
				56.919			41.24
							+.14

No. 88.

1900							
May 8	8	13	23	12.931	−9	13	33.05
14	8			13.017			33.19
				12.974			33.12
							−.03

No. 91.

1899							
Apr. 20	6½	13	23	47.685	−5	25	58.50
28	6½			47.683			57.49
				47.684			57.99
							−.06

No. 93.

1900							
May 15	7¼	13	24	5.008	−18	12	39.48
16	7			5.013			39.87
				5.010			39.68
							+.05

No. 94.

1900							
May 17	8½	13	24	14.773	−22	45	52.64
18	8½			14.810			52.77
				14.791			52.70
							+.11

No. 95.

1900	Mag.	h	m	s	°	′	″
May 28	6½	13	24	6.928	−0	50	42.63
29	6¾			6.876			43.10
				6.902			42.87
							−.08

No. 97.

1900							
Apr. 27	7¾	13	24	35.860	−19	47	42.93
May 7	7½			35.803			43.97
				35.831			43.45
							+.07

No. 99.

1900							
May 21	4	13	25	14.666	−38	53	28.31
22	4			14.672			27.22
				14.669			27.76
							+.58

No. 101.

1900							
Apr. 17		13	25	12.618	−5	57	15.55
18				12.630			15.12
				12.624			15.33
							−.05
Obs. Lat. 303						37	20 26.20
Red. Lat.							26.10
							−.19

No. 103.

1900							
May 8	8¼	13	25	38.045	−9	10	35.99
14	8			38.077			36.05
				38.061			26.02
							−.03

No. 104.

1899							
Apr. 18	8½	13	25	31.089	−1	45	14.61
19	8			31.064			14.37
				31.076			14.49
							−.08

No. 106.

1900							
May 24	7	13	25	41.609	−2	32	5.12
25	7			41.642			5.56
				41.626			5.34
							−.07

No. 107.

1900							
May 28	8	13	26	20.408	−25	35	59.26
29	7¾			20.357			58.46
				20.382			58.86
							+.15

No. 108.

1900							
Apr. 9	8½	13	26	1.361	−1	44	47.92
16	8½			1.421			48.08
				1.391			48.00
							−.08

No. 111.

1900	Mag.	h	m	s	°	′	″
May 15		13	26	39.152	−18	12	47.69
16				39.134			48.25
				39.143			47.97
							+.05
Obs. Lat. 303						37	20 25.59
Red. Lat.							25.44
							−.29

No. 112.

1899							
Apr. 20	6	13	26	55.724	−29	2	44.15
28	6			55.755			44.18
				55.740			44.16
							+.22

No. 114.

1900							
May 17	7½	13	26	36.347	−1	48	34.98
18	7¼			36.325			35.17
				36.336			35.07
							−.08

No. 115.

1899							
May 2	5	13	26	42.773	−5	44	3.66
4	5			42.744			3.83
				42.758			3.74
							−.05

No. 117.

1900							
Apr. 17	6	13	27	30.982	−14	50	55.09
18	6			30.927			54.93
				30.954			55.01
							+.02

No. 118.

1900							
Apr. 27	5½	13	27	41.884	−9	38	59.93
May 7	5½			41.996			59.67
				41.940			59.80
							−.03

No. 119.

1900							
May 21	7	13	27	48.100	−1	54	35.35
22	7			48.074			35.40
				48.087			35.37
							−.08

No. 121.

1900							
May 24	7	13	28	10.982	−7	6	32.49
25	7			10.985			32.83
				10.983			32.66
							−.04

No. 124.

1899							
Apr. 18	7½	13	28	57.433	−11	1	3.58
19	6¾			57.459			4.10
				57.446			3.84
							−.01

No. 126.

1900							
Apr. 9	7	13	29	21.338	−12	42	6.17
16	7			21.427			5.79
				21.382			5.98
							.00

No. 129.

1899	Mag.	h	m	s	°	′	″
May 2	8½	13	30	10.028	−4	24	58.84
4	8½			10.051			58.74
				10.040			58.79
							−.06

No. 130.

1900							
May 8	6	13	30	19.117	−4	53	12.33
14	6			19.095			12.01
				19.106			12.17
							−.06

No. 132.

1900							
Apr. 17	8½	13	30	38.318	−9	16	23.84
18	8½			38.360			23.77
				38.339			23.81
							−.03

No. 135.

1900							
May 15	6½	13	31	15.415	−25.59		5.48
16	6½			15.411			6.77
				15.413			6.12
							+.16

No. 139.

1900							
May 17	7¾	13	31	40.400	−15.56		10.32
18	7½			40.362			10.78
				40.381			10.55
							+.03

No. 142.

1899							
Apr. 18	7½, 8	32		17.658	−7	21	23.62
19	7½, 8½			17.599			23.99
Mean				17.628			23.81
							−.04

No. 143.

1900							
Apr. 9	7½	13	32	45.507	−29	19	48.78
16	7½			45.477			48.92
				45.492			48.85
							+.22

No. 144.

1900							
Apr. 27	8½	13	32	25.318	−6	8	33.73
May 7	8½			25.328			33.66
				25.323			33.69
							−.05

No. 145.

1900							
May 8	6¾	13	32	36.758	−2	43	33.00
14	6¾			36.751			33.06
				36.754			33.03
							−.07

No. 146.

1900							
May 15	6	13	33	4.811	−29	3	0.26
16	6			4.762			0.30
				4.786			0.28
							+.22

No. 147.

1900	Mag.	h	m	s	°	′	″
May 21	8¾	13	32	47.477	−1	3	52.86
22	9			47.449			53.29
				47.463			53.07
							−.08

No. 148.

1899							
May 2	8¼	13	33	17.347	−3	11	30.70
4	8¼			17.370			30.90
				17.358			30.80
							−.07

No. 151.

1900							
Apr. 17	7½	13	33	58.229	−14	42	0.56
18	7½			58.202			1.13
				58.216			0.84
							+.02

No. 152.

1900							
May 17	7½	13	33	58.891	−11	34	57.76
18	7½			58.855			57.70
				58.873			57.73
							−.01

No. 154.

1899							
Apr. 20	6½	13	34	29.930	−27	3	54.28
28	6½			29.968			54.13
				29.949			54.21
							+.18

No. 158.

1899							
Apr. 18	7	13	35	36.855	−12	16	15.83
19	7			36.761			16.08
				36.808			15.95
							−.01

No. 159.

1900							
Apr. 9	7	13	35	59.686	−22	56	39.04
16	7			59.659			38.82
				59.672			38.93
							+.11

No. 162.

1899							
May 2		13	36	18.584	−8	11	36.05
4				18.630			36.23
				18.607			36.14
							−.04
Obs. Lat. 303					37	20	26.12
Red. Lat.							25.86
							−.20

No. 162.

1900							
Apr. 27		13	36	21.712	−8	11	54.02
May 7				.754			54.39
21				.735			54.13
22				.756			54.64
24				.670			54.37
25				.682			54.50
28				.721			54.47
29				.645			54.51
				21.709			54.38
							−.04
Obs. Lat. 303					37	20	25.84
Red. Lat.							25.69
							−.20

No. 166.

1899	Mag.	h	m	s	°	′	″
Apr. 20	8	13	37	36.398	−10	47	32.04
28	7¾			36.411			32.24
				36.404			32.14
							−.02

No. 171.

1900							
May 8	7½	13	38	19.258	−3	46	11.68
14	7½			19.255			12.49
				19.256			12.09
							−.07

No. 174.

1900							
May 15		13	38	41.981	−4	59	42.36
16	6¾			41.892			43.02
				41.936			42.69
							−.06

No. 175.

1900							
May 17	7	13	38	56.674	−10	56	1.38
18	7½			56.654			1.32
				56.664			1.35
							−.02

No. 176.

1899							
Apr. 18	5½	13	39	2.781	−15	40	15.55
19	5½			2.718			15.47
				2.749			15.51
							+.03

No. 177.

1900							
Apr. 18	7½	13	39	22.955	−13	43	4.08
May 28	7			.943			4.37
29	7½			.900			4.14
				22.933			4.20
							+.01

No. 178.

1900							
Apr. 9	5	13	40	0.208	−32	32	16.41
16	5			0.298			17.87
				0.253			17.14
							+.31

No. 179.

1899							
May 2	6¾	13	39	39.162	−7	7	37.58
4	6¾			39.158			37.87
				39.160			37.73
							−.04

No. 180.

1900							
Apr. 27	6	13	40	1.966	−25	36	50.76
May 7	6			1.889			51.29
				1.927			51.03
							+.15

No. 181.

1900							
May 21	6½	13	40	11.837	−15	15	54.34
22	6½			11.907			54.45
				11.872			54.40
							+.02

No. 182.

1900	Mag.	h	m	s	°	′	″
May 24	8¼	13	40	0.135	−2	48	45.39
25	8½			0.170			45.30
				0.152			45.35
							−.07

No. 183.

1900							
May 8	8	13	40	17.528	−11	52	59.48
14	7¾			17.567			59.58
				17.547			59.53
							−.01

No. 185.

1900							
May 15		13	40	34.126	−10	43	19.39
16	7½			34.183			19.79
				34.154			19.59
							−.02

No. 186.

1900							
May 17	5½	13	40	36.445	−11	55	31.43
18	5½			36.429			31.51
				36.437			31.47
							−.01

No. 187.

1899							
Apr. 20	6	13	41	3.044	−35	44	46.76
28	5½			2.975			45.33
				3.010			46.05
							+.42

No. 190.

1900							
Apr. 17	7¼	13	41	45.928	−18	45	19.63
18	7			45.960			19.96
				45.944			19.80
							+.06

No. 191.

1900							
May 29	6	13	41	58.875	−17	21	32.86
31	5½			58.858			33.77
				58.866			33.31
							+.04

No. 192.

1900							
May 24	7	13	42	11.744	−6	12	20.06
25	7			11.741			19.63
				11.742			19.85
							−.05

No. 193.

1899							
Apr. 18	8	13	42	6.512	−1	56	19.43
19	7½			6.512			18.97
				6.512			19.20
							−.08

No. 197.

1900							
Apr. 27	4	13	43	30.214	−41	11	23.29
May 7	4			30.219			22.81
				30.216			23.05
							+.93

No. 198.

1900	Mag.	h	m	s	°	′	″
May 8	4	13	43	35.462	−41	58	31.84
14	4			35.434			33.33
				35.448			32.59
							+1.16

No. 201.

1899							
May 2	6½	13	43	0.851	−6	20	0.33
4	6½			0.928			0.67
				0.890			0.50
							−.05

No. 202.

1900							
May 15	5	13	43	38.981	−33	57	4.28
16	5			38.939			4.20
				38.960			4.24
							+.35

No. 203.

1900							
Apr. 9	7¼	13	43	28.772	−2	20	31.65
16	7			28.743			31.46
				28.757			31.56
							−.07

No. 204.

1899							
Apr. 20		13	44	22.928	−17	37	51.46
28				22.948			51.59
				22.938			51.52
							+.05
Obs. Lat. B. J.					37	20	25.21
Red. Lat.							24.97
							−.29

No. 206.

1900							
Apr. 17	7	13	44	44.619	−20	22	21.77
18	7			44.651			21.95
				44.635			21.86
							+.08

No. 207.

1900							
May 28	6	13	45	35.490	−46	24	15.80
29	6½			35.459			12.70
				35.474			14.25
							+3.45

No. 212.

1900							
May 17	8½	13	45	27.003	−20	29	19.06
18	7¾			26.933			19.05
				26.968			19.06
							+.08

No. 213.

1899							
Apr. 18		13	45	14.232	−7	5	45.75
19	7¼			14.226			46.57
				14.229			46.16
							−.04

No. 216.

1899							
May 2	5	13	45	59.760	−32	29	36.29
4	6			59.734			35.06
				59.747			35.67
							+.30

No. 217.

1900	Mag.	h	m	s	°	′	″
May 24	7¾	13	46	3.823	−32	29	57.04
25	7¾			3.820			56.62
				3.821			56.83
							+.30

No. 218.

1900							
May 21	6¾	13	45	35.385	−7	17	16.47
22	6¾			35.423			16.41
				35.404			16.44
							−.04

No. 221.

1899							
Apr. 20	5	13	47	23.607	−31	25	43.73
28	5			23.612			43.48
				23.610			43.61
							+.27

No. 222.

1900							
Apr. 9	6	13	47	41.943	−35	10	14.42
16	6			41.990			15.18
				41.966			14.80
							+.39

No. 227.

1900							
Apr. 17	7¾	13	48	1.132	−3	2	52.55
18	7½			1.102			52.68
				1.117			52.62
							−.07

No. 229.

1900							
Apr. 27	7	13	48	34.982	−28	15	1.65
May 7	7			35.035			1.09
				35.008			1.37
							+.20

No. 230.

1900							
May 15	6¼	13	48	36.874	−28	4	31.66
16	6¼			36.865			31.61
				36.870			31.63
							+.20

No. 231.

1900							
May 17	3	13	49	17.953	−46	47	49.58
18	3			17.936			52.12
				17.944			50.85
							+3 82

No. 237.

1899							
Apr. 18		13	49	30.838	−1	0	22.09
19				30.893			22.59
				30.865			22.34
							−.08
Obs. Lat. 303					37	20	26.50
Red. Lat.							26.26
							−.16

No. 237.

1900	Mag.	h	m	s	°	′	″
May 8		13	49	33.963	− 1	0	39.26
14				.987			40.39
21				.978			40.00
22				.924			40.24
24				.978			40.18
25				34.014			39.69
				33.974			39.96
							−.08
Obs. Lat. 303					37	20	26.13
Red. Lat.							25.98
							−.16

No. 238.

1899	Mag.	h	m	s	°	′	″
May 2	7	13	49	40.322	− 7	33	42.13
4	7, 8			40.296			41.56
Mean				40.309			41.84
							−.04

No. 245.

1899	Mag.	h	m	s	°	′	″
Apr. 20	7½	13	51	16.471	− 9	32	19.76
28	7½			16.486			19.59
				16.478			19.67
							−.03

No. 246.

1900	Mag.	h	m	s	°	′	″
Apr. 17	5	13	52	11.414	− 41	36	46.18
18	5			11.421			46.13
				11.417			46.15
							+1.05

No. 249.

1900	Mag.	h	m	s	°	′	″
May 8	5	13	52	30.069	− 44	18	55.25
14	5			30.045			57.81
				30.057			56.53
							+2.06

No. 252.

1900	Mag.	h	m	s	°	′	″
May 15	8½	13	52	26.315	− 4	59	36.48
16	8½			26.344			37.22
				26.330			36.85
							−.06

No. 253.

1900	Mag.	h	m	s	°	′	″
Apr. 9		13	52	54.356	− 24	29	2.64
16				.377			3.04
27				.367			2.28
May 7				.369			2.25
17				.325			3.07
18				.356			3.51
				54.358			2.80
							+.13
Obs. Lat. 303					37	20	25.63
Red. Lat.							25.50
							−.37

No. 256.

1899	Mag.	h	m	s	°	′	″
May 2	7	13	53	1.889	− 11	33	46.41
4	7			1.852			46.26
				1.870			46.33
							−.01

No. 262.

1900	Mag.	h	m	s	°	′	″
May 21	6	13	54	23.978	− 24	31	20.96
22	6			23.986			20.10
				23.982			20.53
							+.13

No. 267.

1900	Mag.	h	m	s	°	′	″
May 8	6	13	55	29.133	− 45	7	7.20
14	5½			29.130			12.37
				29.131			9.79
							+2.51

No. 269.

1899	Mag.	h	m	s	°	′	″
Apr. 20	6½	13	54	35.178	− 3	3	27.65
28	6½			35.228			27.55
				35.203			27.60
							−.07

No. 270.

1900	Mag.	h	m	s	°	′	″
May 24	7	13	54	48.318	− 7	40	30.65
25	6¾			48.339			30.01
				48.328			30.33
							−.04

No. 271.

1900	Mag.	h	m	s	°	′	″
Apr. 17	7¾	13	55	35.076	− 7	35	12.22
18	7¾			35.062			11.87
				35.069			12.04
							−.04

No. 274.

1899	Mag.	h	m	s	°	′	″
May 2	6	13	56	38.079	− 26	56	31.83
4	6			38.053			31.48
				38.066			31.65
							+.17

No. 276.

1900	Mag.	h	m	s	°	′	″
Apr. 9	7½	13	57	1.770	− 19	19	38.03
16	7½			1.773			38.26
				1.771			38.14
							+.06

No. 278.

1900	Mag.	h	m	s	°	′	″
Apr. 27	8½	13	56	59.000	− 11	33	16.15
May 7	8½			58.980			15.82
				58.990			15.98
							−.01

No. 286.

1899	Mag.	h	m	s	°	′	″
Apr. 18	6¼	13	58	58.833	− 14	29	10.94
19	6¼			58.800			10.16
				58.816			10.55
							+.01

No. 287.

1899	Mag.	h	m	s	°	′	″
Apr. 20	6½	13	59	0.472	− 8	46	20.93
28	6½			0.486			20.86
				0.479			20.89
							−.03

No. 288.

1900	Mag.	h	m	s	°	′	″
May 24	5	13	59	56.400	− 40	42	2.98
25	5½			56.366			2.73
				56.383			2.86
							+.81

No. 290.

1900	Mag.	h	m	s	°	′	″
May 21	7	13	59	48.552	− 14	22	35.47
22	7			48.580			35.69
				48.566			35.58
							+.01

No. 291.

1899	Mag.	h	m	s	°	′	″
May 2	8½	13	59	50.371	− 8	33	52.18
4	8½			50.263			51.98
				50.317			52.08
							−.03

No. 293.

1900	Mag.	h	m	s	°	′	″
Apr. 17	2	14	0	47.661	− 35	52	42.12
18	2			47.725			41.44
				47.693			41.78
							+.42

No. 294.

1900	Mag.	h	m	s	°	′	″
Apr. 27	8	14	0	37.455	− 26	6	2.03
May 7	8			37.500			2.51
				37.477			2.27
							+.16

No. 295.

1900	Mag.	h	m	s	°	′	″
May 8	4	14	0	40.527	− 26	12	1.84
14	4			40.538			2.11
				40.532			1.98
							+.16

No. 297.

1900	Mag.	h	m	s	°	′	″
May 15	6	14	0	59.950	− 8	24	51.56
16	6½			59.861			52.30
				59.906			51.93
							−.03

No. 298.

1900	Mag.	h	m	s	°	′	″
May 21	8½	14	1	38.293	− 18	48	25.78
22	8½			38.294			25.26
				38.293			25.52
							+.06

No. 299.

1900	Mag.	h	m	s	°	′	″
May 17	6	14	1	25.388	− 8	50	11.07
18	6			25.351			10.96
				25.370			11.01
							−.03

No. 300.

1900	Mag.	h	m	s	°	′	″
May 28	7½	14	1	47.047	− 15	42	48.74
29	7			47.003			48.54
				47.025			48.64
							+.03

No. 304.

1899	Mag.	h	m	s	°	′	″
Apr. 18		14	2	25.402	−19	14	29.19
19	8½			25.341			28.73
				25.371			28.96
							+.06

No. 305.

1899	Mag.	h	m	s	°	′	″
Apr. 20	8	14	2	47.922	−26	10	20.65
28	8			47.895			20.48
				47.908			20.56
							+.16

No. 307.

1899	Mag.	h	m	s	°	′	″
May 2	8	14	2	59.003	−12	5	9.41
4	7½			59.027			8.89
				59.015			9.15
							−.01

No. 308.

1900	Mag.	h	m	s	°	′	″
May 15	7	14	3	7.427	−11	21	14.36
16	7			7.407			15.95
				7.417			15.16
							−.01

No. 310.

1900	Mag.	h	m	s	°	′	″
Apr. 27	7½	14	3	28.896	−18	46	10.33
May 7	7½			28.951			10.11
				28.923			10.22
							+.06

No. 311.

1900	Mag.	h	m	s	°	′	″
Apr. 17	6½	14	3	40.824	−9	51	38.54
18	6½			40.791			38.57
				40.807			38.55
							−.02

No. 317.

1899	Mag.	h	m	s	°	′	″
Apr. 18		14	5	19.481	−15	49	30.56
19				19.373			29.62
				19.427			30.09
							+.03
Obs. Lat. 303					37	20	26.39
Red. Lat.							26.15
							−.27

No. 317.

1900	Mag.	h	m	s	°	′	″
Apr. 9		14	5	22.677	−15	49	47.10
16				.719			47.24
May 17				.661			47.15
18				.646			46.27
28				.679			46.74
29				.721			46.08
				22.684			46.76
							+.03
Obs. Lat. 303					37	20	25.43
Red. Lat.							25.29
							−.27

No. 2.

1900	Mag.	h	m	s	°	′	″
May 8	7½	14	5	45.808	−11	28	47.46
14	7½			45.911			47.77
				45.860			47.61
							−.01

No. 3.

1900	Mag.	h	m	s	°	′	″
May 24	7½	14	5	42.856	−5	30	6.76
25	7½			42.886			6.49
				42.871			6.63
							−.05

No. 5.

1899	Mag.	h	m	s	°	′	″
Apr. 20	7½	14	5	55.946	−10	0	9.50
28	7½			55.869			9.39
				55.907			9.45
							−.02

No. 9.

1899	Mag.	h	m	s	°	′	″
May 2	5½	14	6	58.691	−26	47	9.38
4	5½			58.659			8.83
				58.675			9.10
							+.17

No. 10.

1900	Mag.	h	m	s	°	′	″
Apr. 27	7¾	14	6	37.851	−5	39	22.99
May 7	7½			37.879			23.05
				37.865			23.02
							−.05

No. 11.

1900	Mag.	h	m	s	°	′	″
May 15	7	14	7	13.619	−9	25	47.16
16	7			13.593			47.87
				13.606			47.51
							−.03

No. 13.

1900	Mag.	h	m	s	°	′	″
May 28	7¾	14	7	20.630	−2	30	4.75
29	7¼			20.646			4.49
				20.638			4.62
							−.07

No. 14.

1900	Mag.	h	m	s	°	′	″
Apr. 17		14	7	33.584	−9	48	29.47
18				33.568			29.28
				33 576			29.37
							−.02
Obs. Lat. B. J.					37	20	25.12
Red. Lat.							25.01
							−.22

No. 15.

1900	Mag.	h	m	s	°	′	″
May 21	7¼	14	7	35.084	−2	50	30.07
22	7¼			35.061			30.55
				35.072			30.31
							−.07

No. 19.

1900	Mag.	h	m	s	°	′	″
May 8	7	14	9	8.734	−5	28	57.03
14	7			8.735			58.17
				8.734			57.60
							−.05

No. 22.

1899	Mag.	h	m	s	°	′	″
Apr. 20	5½	14	9	49.976	−14	43	46.14
28	5½			50.019			46.49
				49.997			46.31
							+.05

No. 28.

1899	Mag.	h	m	s	°	′	″
May 2		14	10	43.015	−5	31	7.11
4				42.992			7.06
				43.003			7.08
							−.05
Obs. Lat. B. J					37	20	25.75
Red. Lat.							25.49
							−.19

No. 28.

1900	Mag.	h	m	s	°	′	″
Apr. 27		14	10	46.145	−5	31	24.64
May 7				.058			24.41
15				.144			24.44
16				.135			24.67
21				.121			24.66
22				.106			24.74
24				.165			24.55
25				.137			24.45
28				.140			24.21
29				.168			24.58
				46.132			24.54
							−.05
Obs. Lat. B. J.					37	20	25.64
Red. Lat.							25.49
							−.19

No. 29.

1900	Mag.	h	m	s	°	′	″
Apr. 17		14	11	49.632	−26	29	43.53
18	7¼			49.678			42.97
				49.655			43.25
							+.17

No. 33.

1900	Mag.	h	m	s	°	′	″
May 8	5	14	12	59.959	−45	35	48.66
14	5			60.087			51.16
			13	0.023			49.91
							+2.81

No. 34.

1899	Mag.	h	m	s	°	′	″
Apr. 18	6	14	13	18.457	−26	40	32.88
19	6			18.515			31.67
				18.486			32.27
							+.17

No. 36.

1900	Mag.	h	m	s	°	′	″
May 21	6	14	14	19.431	−44	43	31.85
22	6½			19.677			31.31
				19.554			31.58
							+2.27

No. 37.

1899	Mag.	h	m	s	°	′	″
Apr. 20	4	14	13	38.585	−12	54	22.60
28	5			38.578			22.41
				38.581			22.51
							.00

No. 38.

1899	Mag.	h	m	s	°	′	″
May 2	7½	14	13	50.660	−18	3	28.70
4	7½			50.744			29.10
				50.702			28.90
							+.05

No. 40.

1900							
May 15	5½	14	14	28.368	−37	25	31.20
16	5½			28.316			31.77
				28.342			31.49
							+.49

No. 43.

1900							
Apr. 27	6	14	14	23.209	−1	48	11.63
May 7	6			23.215			11.01
				23.212			11.32
							−.08

No. 44.

1900							
Apr. 17	7	14	14	37.816	−6	17	8.61
18	7			37.846			7.99
				37.831			8.30
							−.05

No. 53.

1900							
May 8	6	14	16	20.010	−34	19	46.48
14	6			19.985			46.28
				19.997			46.38
							+.36

No. 54.

1899							
Apr. 20	7	14	16	38.343	−39	9	46.11
28	7			38.338			45.66
				38.340			45.88
							+.59

No. 55.

1900							
May 24	5½	14	16	52.441	−39	3	18.74
25	5			52.537			19.20
				52.489			18.97
							+.58

No. 58.

1900							
May 17	5½	14	17	19.938	−27	17	43.25
18	5			19.923			42.07
				19.930			42.66
							+.18

No. 59.

1899							
Apr. 18	6	14	16	46.176	−1	31	34.30
19	6½			46.165			34.84
				46.170			34.57
							−.08

No. 61.

1899							
May 2	7¾	14	17	34.282	−27	21	19.26
4	7½			34.218			18.87
				34.250			19.06
							+.18

No. 62. N. pr.

1900	Mag.	h	m	s	°	′	″
Apr. 27	7½	14	17	21.038	−7	18	29.31
May 7	7½			21.041			29.58
				21.040			29.45
							−.04

No. 62. S. fol.

1900							
May 28	7½	14	17	21.203	−7	18	35.75
29	7½			21.168			35.29
				21.186			35.52
							−.04

No. 63.

1900							
Apr. 17	8½	14	18	11.177	−27	17	30.07
18	8½			11.196			29.64
				11.186			29.85
							+.18

No. 64.

1900							
May 21		14	18	2.641	−11	15	26.16
22				2.658			25.92
				2.650			26.04
							−.01
Obs. Lat. 303						37	20 25.76
Red. Lat.							25.60
							−.23

No. 66.

1899							
Apr. 20	5½	14	19	39.162	−44	45	54.05
28	5			39.172			53.20
				39.167			53.62
							+2.30

No. 67.

1900							
May 24	5½	14	19	45.050	−44	55	39.36
25	5			44.885			41.34
				44.967			40.35
							+2.40

No. 68.

1900							
May 15	6	14	19	6.171	−24	21	9.40
16	6			6.159			9.42
				6.165			9.41
							+.13

No. 70.

1900							
May 17	6½	14	19	18.274	−11	12	56.62
18	6½			18.173			56.47
				18.223			56.55
							−.01

No. 74.

1900							
May 8	7½	14	19	25.803	−1	53	22.86
14	7½			25.807			23.14
				25.805			23.00
							−.08

No. 76.

1899							
Apr. 18	6½	14	19	49.236	−12	53	46.80
19	6¼			49.234			46.05
				49.235			46.42
							.00

Anon.

1900	Mag.	h	m	s	°	′	″
May 2	7	14	19	57.874	−26	23	39.52
							+.17

No. 78.

1900							
Apr. 27	8	14	20	51.877	−26	24	22.64
May 7	8¼			51.859			23.40
				51.868			23.02
							+.17

No. 81.

1900							
Apr. 17	8½	14	21	29.286	−0	38	7.20
18	8			29.284			7.09
				29.285			7.14
							−.08

No. 82.

1900							
May 15	5½	14	22	18.906	−29	2	31.78
16	5½			18.884			31.82
				18.895			31.80
							+.22

No. 84.

1900							
May 24	6½	14	22	9.326	−5	40	9.82
25	6½			9.322			9.18
				9.324			9.50
							−.05

No. 85.

1900							
May 8	7¼	14	22	19.842	−12	54	35.30
14	7			19.846			35.76
				19.844			35.53
							.00

No. 87.

1900							
May 28	6	14	23	41.462	−44	52	31.73
29	6			41.577			30.26
				41.520			31.00
							+2.37

No. 88.

1899							
Apr. 18		14	22	50.473	−2	33	3.83
19	7½			50.443			3.86
				50.458			3.85
							−.07

No. 89.

1900							
May 17	7	14	23	11.293	−9	33	21.04
18	6½			11.245			21.23
				11.269			21.14
							−.03

No. 90.

1899							
Apr. 20		14	22	59.877	−1	46	31.27
28				59.800			30.31
				59.838			30.79
							−.08
Obs. Lat. B. J.						37	20 25.67
Red. Lat.							25.42
							−.16

No. 90.

1900	Mag.	h	m	s	°	′	″
Apr. 9		14	23	2.924	−1	46	46.89
16				2.921			46.83
				2.922			46.86
							−.08
Obs. Lat. B. J.					37	20	25.18
Red. Lat.							25.08
							−.16

No. 91.

1900							
May 21	6	14	23	25.086	−6	27	5.64
22	6			25.103			5.13
				25.094			5.37
							−.05

No. 94.

1899							
May 2	7½	14	24	41.186	−28	51	38.01
4				41.128			38.11
				41.157			38.06
							+.21

No. 95.

1900							
Apr. 17	7½	14	24	47.726	−3	48	4.08
18	7			47.743			3.69
				47.734			3.89
							−.07

No. 98.

1900							
Apr. 27	7¼	14	25	18.003	−3	37	12.23
May 7	7¼			17.921			12.80
				17.962			12.51
							−.07

No. 100.

1900							
May 15	8	14	25	30.914	−2	39	52.57
16	8			30.920			52.53
				30.917			52.55
							−.07

No. 101.

1899							
Apr. 18		14	25	43.554	−5	21	11.85
19	7½			43.631			11.38
				43.592			11.61
							−.06

No. 104.

1899							
Apr. 20	7	14	27	43.682	−41	39	16.76
28				43.673			16.91
				43.677			16.83
							+1.07

No. 106.

1900							
May 24	8½	14	28	37.664	−46	1	26.00
25	7½			37.716			27.29
				37.690			26.65
							+3.13

No. 108.

1900	Mag.	h	m	s	°	′	″
Apr. 17	7¾	14	28	4.132	−6	29	43.47
18	7½			4.195			43.11
				4.163			43.29
							−.05

No. 109.

1900							
May 17	3	14	29	9.323	−41	43	8.37
18	3			9.216			11.62
				9.270			9.99
							+1.08

No. 110.

1900							
May 28	6	14	29	11.981	−41	4	45.61
29	6			11.967			43.05
				11.974			44.33
							+.90

No. 111.

1900							
May 15	8	14	28	24.137	−6	25	48.73
16	7¾			24.146			48.84
				24.141			48.79
							−.05

No. 113.

1900							
May 24	6	14	29	46.288	−45	48	34.61
25	6			46.197			36.18
				46.242			35.39
							+2.97

No. 116.

1899							
Apr. 18		14	29	9.632	−19	59	45.84
19				9.602			45.75
				9.617			45.79
							+.07
Obs. Lat. 303					37	20	25.48
Red. Lat.							25.24
							−.31

No. 118.

1899							
Apr. 20	7	14	30	43.135	−45	41	39.40
28	6½			43.136			34.39
				43.135			36.89
1900				+3.910			−15.87
June 17				47.097			50.79
19	5½			47.164			55.91
				47.130			53.35
							+2.89

No. 121.

1900							
May 17	8	14	30	57.268	−9	10	31.30
18	8			57.125			30.45
				57.196			30.87
							−.03

No. 122.

1900							
May 28	8¼	14	30	58.098	−3	30	40.68
29	8			58.084			40.95
				58.091			40.81
							−.07

No. 125.

1900	Mag.	h	m	s	°	′	″
May 21	6½	14	32	37.165	−46	8	47.30
22	7			37.388			47.61
				37.276			47.45
							+3.23

No. 127.

1900							
Apr. 17	6½	14	31	40.547	−11	52	49.37
18	6½			40.547			49.02
				40.547			49.20
							−.01

No. 129.

1900							
Apr. 27	7½	14	32	16.825	−22	43	47.45
May 7				16.940			48.28
				16.882			47.87
							+.11

No. 130.

1899							
May 2	7	14	31	52.625	−3	27	7.47
4	7			52.612			7.53
				52.618			7.50
							−.07

No. 133.

1899							
Apr. 18		14	32	34.793	−5	6	34.66
19	7¼			34.713			36.29
				34.753			35.47
							−.06

No. 134.

1900							
May 8	7½	14	33	35.383	−24	35	45.96
14	7½			35.528			45.34
				35.455			45.65
							+.14

No. 135.

1900							
May 24	6½	14	33	51.200	−26	17	29.35
25	6½			51.256			28.85
				51.228			29.10
							+.16

No. 137.

1900							
May 15	7	14	33	37.747	−10	7	21.80
16	7			37.730			22.51
				37.738			22.16
							−.02

No. 138.

1899							
Apr. 20	8	14	33	48.286	−11	9	28.11
28	8			48.376			27.57
				48.331			27.84
							−.01

No. 139.

1900							
May 17	8	14	33	44.558	−5	21	15.23
18	8			44.514			15.45
				44.536			15.34
							−.06

No. 141.

1900	Mag.	h	m	s	°	′	″
Apr. 17	5	14	35	44.710	− 37	21	52.74
18	5½			44.784			51.98
				44.747			52.36
							+.49

No. 142.

1899							
May 2		14	35	21.083	− 22	11	5.80
4	7½			21.044			5.09
				21.063			5.44
							+.10

No. 144.

1900							
Apr. 27	8	14	35	42.783	− 6	1	44.64
May 7				42.784			45.14
				42.783			44.89
							−.05

No. 146.

1900							
May 8	7½	14	36	36.621	− 11	48	26.45
14	7			36.662			26.71
				36.641			26.58
							−.01

No. 150.

1900							
May 24	5	14	37	32.387	− 34	44	35.52
25	4			32.364			35.03
				32.376			35.27
							+.38

No. 151.

1900							
May 15		14	36	55.476	− 11	43	35.08
16	8¼			55.432			34.86
				55.454			34.97
							−.01

No. 153.

1900							
May 21	8½	14	37	23.348	− 24	40	59.58
22	8½			23.310			59.45
				23.329			59.52
							+.14

No. 154.

1899							
Apr. 20	6	14	37	23.169	− 24	34	2.95
28	6			23.151			2.88
				23.160			2.91
							+.14

No. 158.

1900							
May 17		14	37	47.350	− 5	13	25.03
18				.326			25.27
28				.319			24.43
29				.318			24.74
				47.328			24.87
							−.06
Obs. Lat. B. J.					37	20	25.47
Red. Lat.							25.31
							−.18

No. 159.

1899	Mag.	h	m	s	°	′	″
May 2	5½	14	38	47.420	− 34	45	50.41
4	5½			47.453			49.91
				47.436			50.16
							+.38

No. 162.

1900							
Apr. 17	7½	14	39	7.185	− 5	57	54.78
18	7½			7.154			54.12
				7.170			54.45
							−.05

No. 163.

1900							
Apr. 27	6	14	40	12.627	− 25	1	6.56
May 7				12.608			7.34
				12.617			6.95
							+.14

No. 166.

1900							
May 8	7	14	40	30.429	− 20	45	7.08
14	7			30.438			7.04
				30.433			7.06
							+.08

No. 167.

1900							
May 15		14	40	26.874	− 15	2	16.62
16	6			26.815			17.10
				26.844			16.86
							+.02

No. 169.

1899							
Apr. 20	5	14	41	29.986	− 25	12	1.48
28	5½			30.036			0.54
				30.011			1.01
							+.15

No. 171.

1900							
May 17	6½	14	41	32.445	− 20	54	19.29
18	6½			32.337			19.29
				32.391			19.29
							+.08

No. 173.

1900							
May 21	5½	14	41	54.401	− 25	40	6.33
22	6			54.447			5.76
				54.424			6.04
							+.15

No. 176.

1899							
May 2	6	14	42	2.952	− 26	13	23.37
4	6			2.951			23.13
				2.951			23.25
							+.16

No. 181.

1900							
Apr. 17	7½	14	43	21.243	− 12	42	8.24
18	7½			21.284			7.78
				21.263			8.01
							.00

No. 183.

1900	Mag.	h	m	s	°	′	″
Apr. 27	6	14	43	50.108	− 13	43	56.44
May 7				50.076			56.58
				50.092			56.51
							+.01

No. 184.

1900							
May 24	5½	14	44	24.794	− 27	32	38.85
25	5			24.901			38.04
				24.847			38.45
							+.19

No. 185.

1900							
May 15		14	45	6.631	− 43	9	45.15
16	5½			6.568			45.31
				6.600			45.23
							+1.56

No. 186.

1899							
May 2		14	45	5.880	− 15	34	38.30
4				5.931			38.02
				5.905			38.16
							+.02
Obs. Lat. B. J.					37	20	25.20
Red. Lat.							24.94
							−.26

No. 187.

1899							
Apr. 20		14	45	17.333	− 15	37	19.87
28				17.369			20.42
				17.351			20.14
							+.03
Obs. Lat. B. J.					37	20	25.92
Red. Lat.							25.67
							−.27

No. 187.

1900							
May 8		14	45	20.659	− 15	37	34.83
14				20.708			34.73
				20.683			34.78
							+.03
Obs. Lat. B. J.					37	20	25.43
Red. Lat.							25.29
							−.27

No. 188.

1900							
May 28	6¼	14	45	59.235	− 17	22	27.58
29	6¼			59.252			27.74
				59.244			27.66
							+.04

No. 190.

1900							
May 21	6½	14	46	14.482	− 17	56	35.40
22	6½			14.597			35.57
				14.540			35.49
							+.05

No. 191.

1900							
May 17	6	14	45	49.836	− 1	52	57.40
18	5½			49.766			57.16
				49.801			57.28
							−.08

No. 192.

1900	Mag.	h	m	s	°	′	″
Apr. 17	8	14	46	44.339	−33	12	59.41
18	8½			44.446			59.15
				44.392			59.28
							+.33

No. 194.

1900							
Apr. 27	8	14	47	0.211	−14	58	35.98
May 7	8			0.124			36.57
				0.167			36.27
							+.02

No. 195.

1900							
May 24	8	14	47	5.530	−15	59	12.81
25	8¼			5.520			12.91
				5.525			12.86
							+.03

No. 199.

1899							
May 2	6	14	48	28.048	−24	13	45.43
4	5½			28.072			44.90
				28.060			45.16
							+.13

No. 203.

1900							
May 8	7½	14	48	29.759	−8	40	38.11
14	7½			29.791			38.43
				29.775			38.27
							−.03

No. 204.

1900							
May 17	6	14	49	36.353	−33	26	59.39
18	6			36.251			59.81
				36.302			59.60
							+.33

No. 206.

1900							
May 15		14	48	57.058	−11	29	24.87
16	6			57.008			25.98
				57.033			25.43
							−.01

No. 208.

1900							
May 21	8½	14	49	36.030	−25	12	32.29
22	8½			36.048			31.80
				36.039			32.04
							+.15

No. 211.

1900							
May 30	4	14	51	58.927	−42	43	52.77
June 4	4			58.804			54.63
				58.866			53.70
							+1.40

No. 212.

1900							
May 8	6½	14	51	37.482	−20	57	52.93
14	6½			37.556			52.45
				37.519			52.69
							+.08

No. 213.

1899	Mag.	h	m	s	°	′	″
May 2	7	14	51	37.386	−25	2	5.70
4	6¾			37.402			5.27
				37.394			5.49
							+.14

No. 214.

1900							
Apr. 27		14	51	20.422	−11	0	22.08
May 7				20.456			22.29
				20.439			22.18
							−.01
Obs. Lat. 303						37	20 26.13
Red. Lat.							26.00
							−.23

No. 216.

1900							
May 16	4	14	52	39.205	−41	42	11.51
31	3			39.292			12.50
				39.248			12.00
							+1.08

No. 218.

1900							
May 30	6	14	52	53.511	−42	45	34.80
June 4	6½			53.389			35.98
				53.450			35.39
							+1.42

No. 220.

1900							
May 24	6	14	51	57.570	−3	56	20.88
25	5½			57.598			21.36
				57.584			21.12
							−.06

No. 222.

1900							
May 21	6	14	52	43.990	−27	15	21.49
22	6¼			44.035			21.50
				44.012			21.50
							+.18

No. 223.

1900							
May 28	6½	14	52	29.640	−16	57	44.72
29	6½			29.669			44.94
				29.654			44.83
							+.04

No. 225.

1900							
May 17	7	14	52	48.170	−10	45	10.72
18	7			48.099			11.07
				48.134			10.89
							−.02

No. 228.

1900							
Apr. 27	6½	14	53	28.916	−10	44	31.19
May 7	6			28.994			31.46
				28.955			31.33
							−.02

No. 229.

1900							
May 28	6½	14	53	40.068	−4	35	10.55
29	6½			40.016			10.64
				40.042			10.60
							−.06

No. 233.

1899	Mag.	h	m	s	°	′	″
Apr. 20	7	14	54	24.923	−10	31	37.42
28	7			24.988			37.01
				24.956			37.21
							−.02

No. 234.

1899							
May 2	8	14	54	40.517	−18	13	30.71
4	7¾			40.583			31.11
				40.550			30.91
							+.05

No. 237.

1900							
May 8	7	14	56	8.656	−27	39	52.48
14	7			8.749			52.42
				8.702			52.45
							+.19

No. 238.

1900							
Apr. 17		14	55	37.673	−8	7	19.24
18				37.675			19.54
				37.674			19.39
							−.04
Obs. Lat. 303						37	20 25.53
Red. Lat.							25.42
							−.20

No. 239.

1900							
May 24	6	14	56	8.053	−2	21	30.21
25	6			8.096			30.60
				8.074			30.40
							−.07

No. 241.

1900							
Apr. 27	7	14	56	49.090	−7	10	50.19
May 7	6¾			49.108			49.91
				49.099			50.05
							−.04

No. 242.

1900							
May 30	5	14	58	18.509	−46	39	36.10
June 4	5			18.352			38.96
				18.430			37.53
							+3.69

No. 244.

1900							
May 24	7	14	58	14.003	−40	28	10.17
25	6¾			13.997			10.21
				14.000			10.19
							+.75

No. 245.

1900							
May 21	7	14	57	10.292	−7	26	45.92
22	7			10.284			45.70
				10.288			45.81
							−.04

No. 246.

1900							
May 17	7	14	57	29.135	−17	14	19.11
18	7			29.073			18.72
				29.104			18.91
							+.04

No. 249.

1899	Mag.	h	m	s	°	′	″
Apr. 20	6½	14	57	30.034	−2	37	59.82
28	6½			29.967			59.35
				30.000			59.58
							−.07

No. 250.

1900							
Apr. 17	5½	14	58	49.022	−40	40	38.63
18	6			49.085			37.53
				49.053			38.08
							+.80

No. 251.

1900							
May 15		14	58	12.910	−24	53	21.82
16				12.972			21.29
				12.941			21.56
							+.14
Obs. Lat. B. J.					37	20	26.01
Red. Lat.							25.87
							−.38

No. 252.

1900							
May 28	7½	14	57	58.346	−16	11	56.56
29	7½			58.289			56.40
				58.317			56.48
							+.03

No. 254.

1899							
May 2	7½	14	58	13.992	−7	10	31.29
4	7½			14.024			31.57
				14.008			31.43
							−.04

No. 256.

1900							
May 8	8½	14	59	12.039	−14	36	24.18
14	8½			12.035			23.19
				12.037			23.69
							+.02

No. 257.

1900							
May 17	8	14	59	15.877	−0	30	53.66
18	8			15.696			53.54
				15.786			53.60
							−.08

No. 261.

1900							
May 28	6¾	15	0	20.696	−23	44	28.68
29	6½			20.707			28.70
				20.701			28.69
							+.12

No. 262.

1900							
May 30	7	15	0	23.423	−22	56	4.02
June 4	7			23.377			4.67
				23.400			4.34
							+.11

No. 266.

1900							
May 24	6	15	2	6.420	−44	53	44.71
25	5½			6.412			46.74
				6.416			45.73
							+2.38

No. 267.

1899	Mag.	h	m	s	°	′	″
Apr. 20	5	15	0	59.457	−15	51	54.99
28	5¼			59.476			54.96
				59.466			54.97
							+.03

No. 268.

1900							
May 21	7½	15	1	4.978	−12	31	10.22
22	7½			5.057			9.82
				5.017			10.02
							.00

No. 269.

1900							
May 15		15	1	14.020	−16	5	49.04
16	6½			14.058			48.93
				14.039			48.99
							+.03

No. 272.

1899							
May 2	8¼	15	1	44.354	−8	32	19.22
4	8			44.412			19.42
				44.383			19.32
							−.03

No. 276.

1900							
May 17	8	15	2	39.694	−11	39	55.67
18	7¾			39.652			54.86
				39.673			55.27
							−.01

No. 280.

1900							
May 28	7½	15	3	31.520	−13	37	2.16
29	7¼			31.577			2.37
				31.548			2.27
							+.01

No. 282.

1900							
May 30	6½	15	4	1.195	−23	36	13.39
June 4	6¼			1.111			14.20
				1.153			13.80
							+.12

No. 286.

1899							
Apr. 20	7	15	4	16.438	−5	0	27.93
28	7			16.406			27.33
				16.422			27.63
							−.06

No. 288.

1900							
May 17	6	15	6	6.458	−44	7	25.08
18	6			6.360			24.99
				6.409			25.04
							+1.97

No. 289.

1899							
May 2	8½	15	5	14.992	−21	41	36.63
4	8½			14.987			36.28
				14.990			36.45
							+.09

No. 1.

1900	Mag.	h	m	s	°	′	″
May 15		15	5	43.913	−12	40	31.42
16	7½			43.931			31.02
				43.922			31.22
							.00

No. 3.

1900							
May 21		15	6	31.160	−19	24	48.12
22				.180			47.30
June 25				.072			47.49
26				.110			47.39
				31.130			47.58
							+.06
Obs. Lat. B. J.					37	20	25.14
Red. Lat.							24.99
							−.30

No. 5.

1900							
May 24	6¾	15	7	37.962	−24	55	56.89
25	7			37.910			56.22
				37.936			56.56
							+.14

No. 6.

1900							
May 28	6	15	7	37.281	−19	16	15.98
29	6			37.314			16.79
				37.297			16.39
							+.06

No. 8.

1900							
June 5	7½	15	8	1.965	−24	0	13.02
19	7½			1.916			13.54
				1.940			13.28
							+.13

No. 9.

1900							
May 30	7¼	15	7	48.858	−10	37	50.31
June 4	7¼			48.795			50.69
				48.826			50.50
							−.02

No. 10.

1900							
May 21	6	15	8	29.597	−31	8	45.21
22	6			29.708			44.99
				29.652			45.10
							+.27

No. 11.

1900							
May 17	6	15	9	29.251	−41	7	13.77
18	6			29.174			12.80
				29.212			13.28
							+.91

No. 14.

1900							
May 15		15	8	48.867	−18	3	17.24
16	7			48.752			17.72
				48.810			17.48
							+.05

No. 15.

1900	Mag.	h	m	s	°	′	″
May 28	8¾	15	8	50.942	−18	3	53.73
29	8½			50.934			53.68
				50.938			53.70
							+.05

No. 16.

1900	Mag.	h	m	s	°	′	″
May 24	6½	15	8	55.048	−17	23	42.39
25	6½			55.040			42.21
				55.044			42.30
							+.04

No. 17.

1900	Mag.	h	m	s	°	′	″
May 30	8	15	9	15.899	−2	59	29.01
June 4	7½			15.914			29.55
				15.906			29.28
							−.07

No. 19.

1900	Mag.	h	m	s	°	′	″
June 5	6	15	10	34.992	−22	1	47.36
19	6½			35.019			46.85
				35.005			47.10
							+.10

No. 22.

1900	Mag.	h	m	s	°	′	″
May 21	5	15	11	44.620	−29	46	51.58
22	5			44.708			51.43
				44.664			51.51
							+.23

No. 23.

1900	Mag.	h	m	s	°	′	″
May 17	6½	15	12	22.882	−40	25	19.32
18	6½			22.805			20.19
				22.843			19.76
							+.74

No. 26.

1900	h	m	s	°	′	″
May 24	15	11	37.451	−9	0	50.29
25			.488			50.38
June 25			.433			50.43
26			.416			50.46
			37.447			50.39
						−.03
Obs. Lat. B. J.				37	20	25.44
Red. Lat.						25.28
						−.21

No. 28.

1900	Mag.	h	m	s	°	′	″
May 15		15	12	31.849	−0	37	6.08
16	7½			31.838			6.43
				31.843			6.26
							−.08

No. 30.

1900	Mag.	h	m	s	°	′	″
June 5	7	15	14	46.288	−44	34	36.35
19	7			46.420			38.78
				46.354			37.57
							+2.20

No. 31.

1900	Mag.	h	m	s	°	′	″
May 30	5	15	14	48.383	−40	17	8.80
June 4	5			48.401			8.85
				48.392			8.82
							+.72

No. 32.

1900	Mag.	h	m	s	°	′	″
May 28	7	15	13	58.460	−8	46	51.58
29	7			58.424			52.01
				58.442			51.80
							−.03

No. 34.

1900	Mag.	h	m	s	°	′	″
May 17	5	15	15	27.562	−35	53	55.94
18	5			27.478			56.34
				27.520			56.14
							+.42

No. 35.

1900	Mag.	h	m	s	°	′	″
June 5	5	15	15	53.256	−44	19	49.53
19	4			53.401			50.99
				53.328			50.26
							+2.08

No. 37.

1900	Mag.	h	m	s	°	′	″
May 24	6	15	15	13.356	−17	47	44.25
25	6			13.428			43.65
				13.392			43.95
							+.05

No. 38.

1900	Mag.	h	m	s	°	′	″
May 21	8¼	15	15	4.454	−10	40	14.92
22	8½			4.500			14.32
				4.477			14.62
							−.02

No. 40.

1900	Mag.	h	m	s	°	′	″
May 28	7½	15	15	22.311	−15	0	43.57
29	7½			22.318			43.45
				22.314			43.51
							+.02

No. 41.

1900	Mag.	h	m	s	°	′	″
June 25	6¾	15	15	25.891	−15	11	16.25
26	6¾			25.834			16.03
				25.862			16.14
							+.02

No. 42.

1900	Mag.	h	m	s	°	′	″
June 25	5	15	16	45.999	−36	30	0.91
26	5			45.940		29	59.46
				45.970		30	0.18
							+.45

No. 43.

1900	Mag.	h	m	s	°	′	″
May 15		15	15	50.395	−6	15	8.62
16	7½			50.367			9.14
				50.381			8.88
							−.05

No. 45.

1900	Mag.	h	m	s	°	′	″
May 30	7½	15	16	14.608	−6	27	57.03
June 4	7½			14.580			57.27
				14.594			57.15
							−.05

No. 47.

1900	Mag.	h	m	s	°	′	″
June 5	6	15	18	12.922	−39	21	14.49
19	6			12.941			13.71
				12.931			14.10
							+.61

No. 48.

1900	Mag.	h	m	s	°	′	″
May 24	7¾	15	17	10.812	−10	17	50.81
25	8			10.750			50.56
				10.781			50.68
							−.02

No. 50.

1900	Mag.	h	m	s	°	′	″
May 28	6½	15	17	27.058	−14	46	37.71
29	6½			27.086			37.39
				27.072			37.55
							+.02

No. 52.

1900	Mag.	h	m	s	°	′	″
May 17	6	15	18	51.082	−38	22	45.36
18	5½			50.993			47.68
				51.037			46.52
							+.55

No. 54.

1900	Mag.	h	m	s	°	′	″
May 21	6	15	18	22.913	−12	0	45.70
22	6½			22.977			46.18
				22.945			45.94
							−.01

No. 57.

1900	Mag.	h	m	s	°	′	″
June 25	5	15	18	46.530	−9	57	45.88
26	6			46.569			46.14
				46.550			46.01
							−.02

No. 58.

1900	h	m	s	°	′	″
May 30	15	18	34.272	−0	39	56.93
June 4			34.328			56.71
			34.300			56.82
						−.08
Obs. Lat. 303				37	20	25.73
Red. Lat.						25.58
						−.16

No. 61.

1900	Mag.	h	m	s	°	′	″
May 24	8	15	19	37.653	−9	1	23.59
25	8¼			37.691			22.86
				37.672			23.23
							−.03

No. 63.

1900	Mag.	h	m	s	°	′	″
May 28	7¼	15	19	46.470	−5	53	33.28
29	7¼			46.392			33.43
				46.431			33.36
							−.05

No. 64.

1900	Mag.	h	m	s	°	′	″
May 30	6	15	20	53.797	−36	25	0.17
June 4	6			53.795			1.42
				53.796			0.80
							+.45

No. 65.

1900							
June 5	7	15	20	18.051	−21	1	43.91
19	7			18.072			43.56
				18.061			43.73
							+.08

No. 70.

1900							
May 17	8½	15	21	50.868	−5	28	4.21
18	8			50.793			4.03
				50.830			4.12
							−.05

No. 71.

1900							
May 21	7½	15	22	30.957	−20	51	42.73
22	7½			30.966			42.65
				30.961			42.69
							+.08

No. 75.

1900							
May 24		15	22	36.891	−16	22	3.86
25				.942			3.60
June 5				.899			4.31
19				.871			3.70
				36.901			3.87
							+.03
Obs. Lat. 303						37	20 25.03
Red. Lat.							24.88
							−.27

No. 77.

1900							
May 28	7¾	15	22	45.432	−11	6	4.66
29	7¾			45.424			4.76
				45.428			4.71
							−.01

No. 79.

1900							
May 30	7¾	15	23	5.115	−5	39	21.48
June 4	7½			5.084			21.60
				5.100			21.54
							−.05

No. 80.

1900							
June 25	7	15	23	55.251	17	5	45.20
26	7			55.223			45.53
				55.237			45.37
							+.04

No. 84.

1900							
May 15	6	15	25	1.758	−16	15	59.06
16	6			1.798			58.72
				1.778			58.89
							+.03

No. 87.

1900	Mag.	h	m	s	°	′	″
May 17	8¼	15	25	20.054	−18	29	36.95
18	8¼			19.957			36.66
				20.006			36.80
							+.05

No. 88.

1900							
May 21	7½	15	25	28.018	−15	30	12.28
22	7½			28.092			12.21
				28.055			12.24
							+.02

No. 90.

1900							
May 24	8	15	26	4.071	−27	49	31.94
25	8			4.020			31.82
				4.046			31.88
							+.19

No. 91.

1900							
May 28	7	15	25	58.113	−19	49	22.43
29	7			58.068			22.36
				58.090			22.40
							+.07

No. 94.

1900							
May 30	8¼	15	26	49.923	−19	3	46.67
June 4	8¼			49.865			47.29
				49.894			46.98
							+.06

No. 96.

1900							
June 5	6	15	26	51.896	−19	19	48.01
19	6			51.896			47.54
				51.896			47.78
							+.06

No. 97.

1900							
June 25	6½	15	27	16.140	−16	30	48.78
26	6			16.139			49.09
				16.139			48.94
							+.03

No. 98.

1900							
May 30	4	15	28	28.518	−40	49	51.03
June 4	4			28.421			52.06
				28.470			51.54
							+.83

No. 99.

1900							
May 21	5½	15	28	59.978	−44	37	26.70
22	6		29	0.088			27.01
			29	0.033			26.85
							+2.22

No. 101.

1900							
May 24	8½	15	27	42.910	−9	46	18.47
25	8			42.955			17.54
				42.932			18.00
							−.02

No. 102.

1900	Mag.	h	m	s	°	′	″
May 17	6½	15	28	33.508	−27	42	37.09
18	6			33.426			36.50
				33.467			36.79
							+.19

No. 104.

1900							
May 28	6	15	27	48.832	−0	50	49.22
29	6			48.767			49.44
				48.800			49.33
							−.08

No. 106.

1900							
May 15		15	28	42.655	−9	43	19.51
16				.642			18.88
June 5				.624			19.26
19				.611			18.62
				42.633			19.07
							−.02
Obs. Lat. 303						37	20 26.01
Red. Lat.							25.85
							−.22

No. 111.

1899							
July 14		15	29	52.487	−14	27	9.50
17				52.408			10.50
				52.447			10.00
							+.01
Obs. Lat. B. J.						37	20 25.96
Red. Lat.							25.83
							−.25

No. 113.

1900							
May 24	5½	15	31	18.868	−42	14	21.64
25	5½			18.968			22.35
				18.918			21.99
							+1.25

No. 116.

1900							
June 5	4	15	30	57.040	−27	48	13.99
19	5			57.055			13.87
				57.047			13.93
							+.19

No. 118.

1900							
May 30	6¾	15	31	28.475	−25	56	56.18
June 4	6½			28.447			56.72
				28.461			56.45
							+.16

No. 120.

1900							
May 15	7	15	32	10.879	−27	52	39.25
16	6¾			10.867			38.04
				10.873			38.64
							+.19

No. 123.

1900							
May 17	5¾	15	32	30.792	−29	26	56.15
18	5			30.668			56.03
				30.730			56.09
							+.23

No. 125.

1900	Mag.	h	m	s	°	′	″
May 21	7	15	32	25.253	−14	12	3.31
22	7½			25.265			3.11
				25.259			3.21
							+.01

No. 127.

1900							
June 25	9¼	15	32	37.919	−13	46	21.47
26	9			37.924			20.99
				37.921			21.23
							+.01

No. 128.

1900							
May 24	6	15	33	24.858	−34	5	8.36
25	5½			24.852			7.49
				24.855			7.93
							+.35

No. 129.

1900							
May 30	7	15	33	57.790	−44	17	50.09
June 8	7½			57.755			51.55
				57.772			50.82
							+2.06

No. 132.

1899							
July 14		15	32	51.110	−14	11	0.52
17	7			51.073			0.46
				51.091			0.49
							+.01

No. 133.

1900							
May 28		15	33	9.054	−18	58	21.16
29				9.050			21.80
				9.052			21.48
							+.06
Obs. Lat. 303					37	20	25.08
Red. Lat.							24.92
							−.30

No. 134.

1900							
June 25 [4]		15	34	18.877	−44	19	54.02
26	5½			18.776			49.48
				18.826			51.75
							+2.08

No. 138.

1900							
May 28	6	15	34	22.053	−23	29	34.87
29	5½			22.119			35.95
				22.086			35.41
							+.12

No. 139.

1900							
June 5	7½	15	34	14.998	−13	43	46.47
19	7¾			14.976			46.99
				14.987			46.73
							+.01

No. 141.

1900							
May 21	6	15	36	8.195	−37	6	14.83
22	6			8.227			14.32
				8.211			14.57
							+.48

No. 143.

1900	Mag.	h	m	s	°	′	″
May 17	6¼	15	36	18.607	−34	23	21.47
18	6			18.517			21.24
				18.562			21.36
							+.37

No. 144.

1900							
May 15	7½	15	35	41.802	−13	38	52.71
16	7			41.842			51.97
				41.822			52.34
							+.01

No. 145.

1899							
July 14		15	36	7.496	−19	21	5.58
17	5			7.510			5.47
				7.503			5.52
							+.06

No. 149.

1900							
May 24	7½	15	37	12.347	−25	5	47.31
25	7½			12.321			46.66
				12.334			46.98
							+.14

No. 150.

1900							
May 30	7½	15	37	8.662	−15	41	34.18
June 4	7½			8.713			34.39
				8.687			34.29
							+.03

No. 157.

1900							
May 28		15	38	26.738	−15	21	15.35
29				26.770			15.70
				26.754			15.52
							+.02
Obs. Lat. 303					37	20	25.43
Red. Lat.							25.27
							−.26

No. 161.

1900							
May 21	6½	15	40	20.911	−34	22	10.24
22	6½			20.912			9.09
				20.911			9.66
							+.37

No. 166.

1900							
May 24	5½	15	40	55.183	−1	29	27.68
25	6			55.210			27.30
				55.196			27.49
							−.01

No. 174.

1900							
May 24	5	15	44	36.172	−33	19	21.58
25	5			36.134			20.81
				36.153			21.19
							+.33

No. 175.

1900							
May 21	6¼	15	43	42.471	−3	30	43.67
22	6¼			42.459			43.45
				42.465			43.56
							−.07

No. 177.

1900	Mag.	h	m	s	°	′	″
May 17	5½	15	44	57.792	−25	26	50.69
18	5½			57.693			50.87
				57.742			50.78
							+.15

No. 178.

1899							
July 14		15	44	20.856	−3	7	16.65
17				20.917			16.16
				20.886			16.41
							−.07
Obs. Lat. B. J.					37	20	25.57
Red. Lat.							25.44
							−.17

No. 178.

1900							
May 30		15	44	24.007	−3	7	27.15
June 4				23.999			27.16
25				23.971			26.84
26				23.991			27.43
				23.992			27.15
							−.07
Obs. Lat. B. J.					37	20	25.41
Red. Lat.							25.25
							−.17

No. 180.

1900							
May 15	7¾	15	44	43.111	−3	36	58.20
16	7½			43.131			57.46
				43.121			57.83
							−.07

No. 186.

1900							
June 5	5½	15	46	2.959	−2	47	16.37
19	5½			2.946			16.24
				2.952			16.30
							−.07

No. 189.

1900							
May 30	5	15	47	36.408	−25	1	43.28
June 4	5¾			36.325			43.42
				36.366			43.35
							+.14

No. 190.

1900							
June 25	5	15	47	31.694	−19	52	5.72
26	5½			31.604			5.24
				31.649			5.48
							+.07

No. 191.

1900							
May 24	6	15	47	55.443	−24	14	7.48
25	6			55.417			6.29
				55.430			6.88
							+.13

No. 192.

1900							
May 15	6	15	47	58.628	−23	40	50.30
16	6			58.631			49.20
				58.630			49.75
							+.12

No. 193.

1899	Mag.	h	m	s	°	′	″
July 14		15	48	4.358	−16	25	58.43
17	4			4.397			58.37
				4.377			58.40
							+.03

No. 195.

1900	Mag.	h	m	s	°	′	″
May 17	6½	15	48	39.284	−24	56	51.08
18	6½			39.207			50.51
				39.246			50.79
							+.14

No. 196.

1900	Mag.	h	m	s	°	′	″
May 30	6	15	49	27.287	−25	58	16.24
June 4	6			27.343			16.76
				27.315			16.50
							+.16

No. 197.

1900	Mag.	h	m	s	°	′	″
June 5	6½	15	49	13.533	−19	5	16.35
19	6½			13.455			16.04
				13.494			16.20
							+.06

No. 199.

1900	Mag.	h	m	s	°	′	″
May 24	6½	15	49	56.254	−31	29	36.22
25	6¼			56.265			35.46
				56.260			35.84
							+.28

No. 204.

1900	Mag.	h	m	s	°	′	″
May 28	6½	15	50	29.694	−33	40	25.27
29	6½			29.775			25.30
				29.734			25.29
							+.34

No. 205.

1900	Mag.	h	m	s	°	′	″
June 25	7	15	50	30.436	−33	40	19.16
26	6½			30.399			19.12
				30.417			19.14
							+.34

No. 207.

1900	Mag.	h	m	s	°	′	″
June 5	5	15	50	42.414	−28	55	19.30
19	4			42.552			20.07
				42.483			19.69
							+.21

No. 210.

1899	Mag.	h	m	s	°	′	″
July 14	7	15	51	17.328	−21	11	31.85
17	7			17.338			31.79
				17.333			31.82
							+.09

No. 213.

1900	Mag.	h	m	s	°	′	″
May 15	7	15	51	52.106	−23	14	16.60
16	7			52.136			16.23
				52.121			16.41
							+.12

No. 216.

1900	Mag.	h	m	s	°	′	″
May 21	4	15	52	47.997	−25	49	35.49
22	4			48.055			35.28
				48.026			35.39
							+.15

No. 217.

1900	Mag.	h	m	s	°	′	″
May 24	5	15	53	29.642	−38	6	40.14
25	5½			29.673			37.65
				29.657			38.89
							+.53

No. 218.

1900	h	m	s	°	′	″
May 17	15	52	35.302	−13	59	27.15
18			.275			27.69
June 25			.202			27.16
26			.235			27.11
			35.253			27.28
						+.01
Obs. Lat. 303					37 20	26.10
Red. Lat.						25.94
						−.25

No. 225.

1899	h	m	s	°	′	″
July 21	15	54	21.516	−22	20	4.11
24			21.509			2.70
			21.512			3.41
						+.10
Obs. Lat. B. J.					37 20	25.17
Red. Lat.						25.06
						−.34

No. 225.

1900	h	m	s	°	′	″
May 30	15	54	25.136	−22	20	14.06
June 4			.113			14.21
5			.087			14.23
19			.129			14.36
23			.151			14.45
24			.067			14.56
			25.114			14.31
						+.10
Obs. Lat. B. J.					37 20	25.52
Red. Lat.						25.36
						−.34

No. 227.

1900	h	m	s	°	′	″
May 28	7	15	54	19.599	−7	1	1.84
29	7			19.598			2.03
				19.598			1.93
							−.04

No. 228.

1899	h	m	s	°	′	″
July 14	5	15	54	39.427	−16	14	9.14
17	5			39.294			9.73
				39.360			9.43
							+.03

No. 231.

1900	Mag.	h	m	s	°	′	″
May 15	6	15	55	23.588	−8	7	43.17
16	5¾			23.627			42.68
				23.607			42.92
							−.04

No. 232.

1900	Mag.	h	m	s	°	′	″
May 24	6	15	56	44.976	−38	19	25.32
25	6			45.101			24.87
				45.038			25.09
							+.54

No. 236.

1900	Mag.	h	m	s	°	′	″
May 30	7½	15	57	39.369	−35	10	17.17
June 4	7			39.345			17.84
				39.357			17.50
							+.39

No. 237.

1900	Mag.	h	m	s	°	′	″
May 17	5½	15	57	17.960	−25	35	11.54
18	6			17.845			10.93
				17.902			11.24
							+.15

No. 240.

1899	Mag.	h	m	s	°	′	″
July 21	7½	15	57	14.817	−8	12	45.93
24	7½			14.806			45.84
				14.811			45.89
							−.03

No. 242.

1900	Mag.	h	m	s	°	′	″
June 5	5½	15	59	25.293	−44	54	8.84
19	5			25.454			8.48
				25.373			8.66
							+2.38

No. 243.

1899	Mag.	h	m	s	°	′	″
July 14	7½	15	57	49.330	−8	11	58.43
17	7			49.323			57.93
				49.326			58.18
							−.04

No. 244.

1900	Mag.	h	m	s	°	′	″
May 21	8	15	59	4.039	−20	37	30.77
22	8¼			4.077			31.20
				4.058			30.99
							+.08

No. 245.

1900	Mag.	h	m	s	°	′	″
May 28	5	15	58	52.044	−11	5	50.07
29	5			52.113			50.99
				52.078			50.53
							−.01

No. 248.

1900	Mag.	h	m	s	°	′	″
June 25	4	16	0	1.428	−36	31	50.18
26	4			1.427			48.77
				1.427			49.47
							+.45

No. 249.

1900	Mag.	h	m	s	°	′	″
May 24	7	15	59	17.142	−18	15	53.20
25	7			17.176			53.20
				17.159			53.20
							+.05

1899							
No. 251.							
July 18		15	59	33.723	−19	31	44.45
20				33.680			44.41
				33.701			44.43
							+.07
Obs. Lat. B. J.					37	20	25.00
Red. Lat.							24.88
							−.31

1900							
No. 251.							
May 15		15	59	37.193	−19	31	54.55
16				.254			54.62
June 27				.226			54.44
28				.220			54.39
				37.223			54.50
							+.07
Obs. Lat. B. J.					37	20	25.30
Red. Lat.							25.15
							−.31

1899							
No. 252.							
July 21	6	15	59	34.109	−19	31	31.82
24	5½			34.180			31.41
				34.144			31.61
							+.07

1900							
No. 254.							
May 17	7	15	59	56.161	−19	24	29.09
18	7½			56.204			28.75
				56.182			28.92
							+.06

1900							
No. 255.							
June 23	6	16	0	41.626	−36	29	3.75
24	6			41.553			3.54
				41.590			3.64
							+.45

1900							
No 256.							
June 25	7	16	1	0.340	−36	27	4.02
26	7¼			0.272			3.16
				0.306			3.59
							+.45

1900							
No. 257.							
May 28	8	16	0	49.720	−27	26	54.90
29	8¼			49.660			55.67
				49.690			55.29
							+.18

1900							
No. 259.							
May 30	5	16	0	57.314	−20	23	53.89
June 4	5			57.307			54.33
				57.310			54.11
							+.08

1900							
No. 260.							
June 5	7½	16	1	52.183	−38	50	14.80
19	7½			52.249			15.62
				52.216			15.21
							+.57

1900							
No. 261.							
June 27	7¼	16	1	52.470	−38	49	29.37
28	7½			52.512			30.40
				52.491			29.89
							+.57

1899							
No. 263.							
July 14		16	1	28.868	−20	35	45.71
17	4			28.771			44.82
				28.819			45.26
							+.08

1900							
No. 264.							
May 28	7½	16	1	58.709	−27	27	46.15
29	7			58.707			46.32
				58.708			46.23
							+.18

1899							
No. 265.							
July 21	5½	16	1	58.156	−26	3	21.61
24	5½			58.142			21.27
				58.149			21.44
							+.16

1900							
No. 268.							
May 21		16	2	3.132	−12	28	35.65
22				3.128			35.66
				3.130			35.65
							.00
Obs. Lat. 303					37	20	26.33
Red. Lat.							26.17
							−.24

1900							
No. 271.							
May 30	6	16	3	27.828	−33	16	49.06
June 4	6			27.844			49.42
				27.836			49.24
							+.33

1900							
No. 272.							
June 5	7¼	16	4	13.637	−45	4	13.67
19	7			13.719			14.80
				13.678			14.23
							+2.48

1899							
No. 273.							
July 18	7½	16	3	11.638	−18	43	36.32
20	7½			11.629			37.04
				11.633			36.68
							+.06

1900							
No. 274.							
June 27	6½	16	4	28.594	−40	51	17.70
28	6¾			28.563			17.52
				28.578			17.61
							+.84

1900							
No. 275.							
May 29	7¾	16	3	32.366	−19	11	31.26
June 23	8¼			.370			30.57
24	8¼			.354			31.48
				32.363			31.10
							+.06

1900							
No. 278.							
June 25	7½	16	3	37.371	−7	57	12.24
26	7½			37.300			12.39
				37.336			12.31
							−.04

1899							
No. 280.							
July 14	5	16	4	45.473	−29	8	58.37
17	5½			45.426			58.40
				45.449			58.38
							+.22

1900							
No. 287.							
May 28	6½	16	6	5.155	−28	9	26.35
29	6½			5.116			26.14
				5.136			26.24
							+.20

1899							
No. 1.							
July 21	7½	16	5	20.558	−8	2	7.20
24	7½			20.629			6.88
				20.593			7.04
							−.04

1900							
No. 2.							
May 30	5½	16	6	8.503	−27	40	1.52
June 4	5½			8.504			1.83
				8.503			1.68
							+.19

1900							
No. 3.							
June 25	7	16	6	9.797	−19	11	24.69
26	7			9.789			24.96
				9.793			24.83
							+.06

1899							
No. 4.							
July 18	4	16	6	7.368	−19	11	52.96
20	4			7.315			53.37
				7.341			53.16
							+.06

1900							
No. 5.							
June 23	8½	16	6	40.278	−27	52	29.08
24	8¼			40.209			28.56
				40.243			28.82
							+.19

1900							
No. 6.							
June 5	5½	16	6	31.980	−9	48	19.01
19	5½			31.915			18.48
				31.947			18.74
							−.02

No. 7.

1900	Mag.	h	m	s	°	′	″
June 25	8	16	6	55.083	−19	14	41.79
26	7			55.099			40.91
				55.091			41.35
							+.06

No. 8.

1900							
June 27	6	16	6	42.091	−8	17	21.48
28	6			42.107			21.06
				42.099			21.27
							−.04

No. 10.

1899							
July 14	6	16	7	44.008	−21	8	31.27
17	6			44.044			31.25
				44.026			31.26
							+.09

No. 14.

1900							
May 30	6½	16	8	49.742	−25	13	24.65
June 4	6½			49.750			24.86
				49.746			24.76
							+.15

No. 15.

1899							
July 21	5	16	8	15.577	−11	34	48.32
24	5½			15.593			48.19
				15.585			48.25
							−.01

No. 16.

1899							
July 25	7	16	8	18.332	−7	51	36.48
27	7			18.364			36.47
				18.348			36.47
							−.04

No. 17.

1900							
June 5	7½	16	8	57.285	−22	7	37.26
19	7½			57.314			37.36
				57.300			37.31
							+.10

No. 21.

1899							
July 18		16	9	3.096	−3	26	3.88
20				3.137			3.69
				3.116			3.78
							−.07
Obs. Lat. B. J.					37	20	25.55
Red. Lat.							25.43
							−.17

No. 26.

1900							
June 27	6	16	10	11.068	−8	6	17.44
28	5½			11.055			17.39
				11.061			17.41
							−.04

No. 28.

1899							
July 14	6	16	11	4.819	−19	51	11.70
17	6			4.837			11.04
				4.828			11.37
							+.07

No. 29.

1900	Mag.	h	m	s	°	′	″
June 25	5½	16	12	20.084	−42	25	49.12
26	6½			19.934			46.18
				20.009			47.65
							+1.30

No. 31.

1899							
July 21	5	16	12	1.972	−28	21	46.07
24	5½			1.956			46.13
				1.964			46.10
							+.20

No. 35.

1900							
May 30	7¾	16	13	11.950	−30	39	33.91
June 4	7½			11.940			34.37
				11.945			34.14
							+.26

No. 36.

1900							
June 5	6	16	13	13.117	−30	39	51.39
19	6			13.132			51.86
				13.124			51.62
							+.26

No. 37.

1900							
June 25	6	16	13	46.903	−39	11	17.36
26	6			46.775			15.59
				46.839			16.47
							+.60

No. 39.

1900							
June 27	6¾	16	13	16.240	−19	58	26.53
28	6½			16.217			26.94
				16.228			26.73
							+.07

No. 41.

1899							
July 25		16	12	58.543	−4	26	46.91
27				58.561			46.90
				58.552			46.90
							−.06
Obs. Lat. B. J.					37	20	26.19
Red. Lat.							26.10
							−.18

No. 41.

1900							
June 23		16	13	1.693	−4	26	56.38
24				1.767			56.11
				1.730			56.24
							−.06
Obs. Lat. B. J.					37	20	26.17
Red. Lat.							26.01
							−.18

No. 44.

1900							
June 5	8	16	14	12.945	−19	48	9.40
19	8½			12.960			9.57
				12.952			9.49
							+.07

No. 45.

1900	Mag.	h	m	s	°	′	″
May 30	8	16	14	14.506	−19	48	51.31
June 4	7½			14.463			51.30
				14.484			51.30
							+.07

No. 46.

1899							
July 21	5	16	14	33.409	−23	55	34.05
24	5			33.394			33.92
				33.401			33.98
							+.12

No. 48.

1899							
July 14	7½	16	14	35.614	−19	52	26.73
17	7½			35.546			25.91
				35.580			26.32
							+.07

No. 49.

1899							
July 31	8	16	14	35.911	−19	52	14.17
Aug. 1	8			35.918			14.31
				35.914			14.24
							+.07

No. 50.

1899							
July 25	3	16	15	2.846	−25	21	1.57
27	4			2.871			1.64
				2.858			1.60
							+.15

No. 55.

1899							
July 20	6	16	17	10.638	−38	57	25.10
31	6			.731			24.71
Aug. 1	6			.773			23.85
				10.714			24.55
							+.58

No. 58.

1900							
June 5	7½	16	16	51.802	−8	30	18.86
19	7½			51.798			18.54
				51.800			18.70
							−.03

No. 60.

1899							
July 25	7	16	18	19.052	−29	28	4.66
27	7			19.061			4.19
				19.056			4.42
							+.23

No. 61.

1899							
July 21	7¾	16	18	17.500	−26	54	56.92
24	7½			17.496			57.38
				17.498			57.15
							+.17

No. 64.

1899							
July 14		16	18	11.452	−19	48	3.53
17				11.463			3.18
				11.457			3.35
							+.07
Obs. Lat. 303						37	20 25.08
Red. Lat.							24.95
							−.31

No. 64.

1900	Mag.	h	m	s	°	′	″
June 23		16	18	15.009	− 19	48	11.85
24				15.025			11.99
				15.017			11.92
							+.07
Obs. Lat. 303					37	20	25.41
Red. Lat.							25.25
							−.31

No. 67.

1900	Mag.	h	m	s	°	′	″
May 30	8	16	19	23.541	− 29	10	13.25
June 4	8			23.545			13.15
				23.543			13.20
							+.22

No. 68.

1900	Mag.	h	m	s	°	′	″
June 5	6¾	16	19	24.388	− 23	13	47.11
19	7			24.381			47.28
				24.384			47.20
							+.11

No. 70.

1899	Mag.	h	m	s	°	′	″
July 31	8	16	19	39.161	− 26	20	10.53
Aug. 1	8			39.098			11.22
				39.130			10.87
							+.16

No. 71.

1900	Mag.	h	m	s	°	′	″
June 25	6	16	19	35.317	− 23	13	1.28
26	6			35.238			1.21
				35.277			1.25
							+.11

No. 72.

1900	Mag.	h	m	s	°	′	″
June 27	7	16	19	35.337	− 23	10	29.96
28	7			35.390			30.01
				35.363			29.99
							+.11

No. 76.

1899	Mag.	h	m	s	°	′	″
July 18	8	16	20	6.136	− 9	51	10.12
20	7½			6.199			9.83
				6.167			9.97
							−.02

No. 80.

1899	Mag.	h	m	s	°	′	″
July 14	5	16	21	10.093	− 18	13	37.80
17	5			10.119			37.06
				10.106			37.43
							+.05

No. 83.

1899	Mag.	h	m	s	°	′	″
July 21	6	16	22	20.275	− 8	8	44.14
24	5			20.309			43.59
				20.292			43.86
							−.04

No. 84.

1899	Mag.	h	m	s	°	′	″
July 31		16	23	12.777	− 26	12	28.81
Aug. 1				12.807			28.04
				12.792			28.42
							+.16
Obs. Lat. B. J.					37	20	25.45
Red. Lat.							25.37
							−.40

No. 84.

1900	Mag.	h	m	s	°	′	″
June 5		16	23	16.471	− 26	12	37.20
19				16.478			37.11
				16.474			37.16
							+.16
Obs. Lat. B. J.					37	20	25.40
Red. Lat.							25.24
							−.40

No. 87.

1899	Mag.	h	m	s	°	′	″
July 25	7	16	23	51.013	− 24	55	29.93
27	7¼			51.015			29.76
				51.014			29.84
1900				+3.640			−8.16
June 4				54.609			38.21
							+.14

No. 88.

1899	Mag.	h	m	s	°	′	″
July 18	7	16	23	21.382	− 7	54	9.72
20	6½			21.353			9.98
				21.367			9.85
							−.04

No. 89.

1900	Mag.	h	m	s	°	′	″
May 30	5½	16	24	7.825	− 24	53	43.11
June 23	5½			.877			42.98
24	5			.850			42.92
				7.851			43.00
							+.14

No. 90.

1899	Mag.	h	m	s	°	′	″
July 14	6	16	24	35.792	− 34	6	45.99
17	6			35.744			46.12
				35.768			46.05
							+.36

No. 92.

1900	Mag.	h	m	s	°	′	″
June 25	5	16	24	50.848	− 34	29	13.20
26	5			50.770			11.39
				50.809			12.29
							+.37

No. 93.

1899	Mag.	h	m	s	°	′	″
July 31	6	16	25	10.746	− 26	19	3.80
Aug. 1	6½			10.792			3.73
				10.769			3.76
							+.16

No. 94.

1900	Mag.	h	m	s	°	′	″
May 30		16	25	24.796	− 16	23	41.22
June 4				.775			41.37
27				.806			41.35
28				.821			40.87
				24.800			41.20
							+.03
Obs. Lat. 303					37	20	26.01
Red. Lat.							25.85
							−.27

No. 95.

1899	Mag.	h	m	s	°	′	″
July 25	6	16	26	54.281	− 43	49	52.94
27	6			54.271			53.84
				54.276			53.39
							+1.85

No. 96.

1899	Mag.	h	m	s	°	′	″
July 18	5	16	26	8.847	− 21	15	1.04
20	5			8.852			0.88
				8.849			0.96
							+.09

No. 98.

1899	Mag.	h	m	s	°	′	″
July 21	7½	16	25	50.746	− 7	42	5.29
24	7¼			50.792			5.74
				50.769			5.51
							−.04

No. 99.

1900	Mag.	h	m	s	°	′	″
June 25	8	16	27	16.870	− 35	19	53.23
26	8			16.736			51.42
				16.803			52.33
							+.40

No. 101.

1900	Mag.	h	m	s	°	′	″
June 5	7	16	26	55.931	− 15	46	14.65
19	7¼			55.906			14.18
				55.918			14.41
							+.03

No. 104.

1899	Mag.	h	m	s	°	′	″
July 21	7	16	28	33.812	− 35	30	46.61
24	7			33.801			46.37
				33.806			46.49
							+.41

No. 106.

1899	Mag.	h	m	s	°	′	″
July 25	6½	16	29	16.241	− 42	39	1.16
27	6½			16.236			0.82
				16.238			0.99
							+1.39

No. 110.

1899	Mag.	h	m	s	°	′	″
July 14	7½	16	28	4.298	− 4	2	49.15
17	7			4.383			48.94
				4.341			49.04
							−.06

No. 111.

1900	Mag.	h	m	s	°	′	″
June 5	5	16	29	47.585	−35	2	58.89
19	4			47.572			59.34
				47.578			59.11
							+.39

No. 113.

1900	Mag.	h	m	s	°	′	″
May 30	3	16	29	39.383	−28	0	31.30
June 4	3			39.341			31.12
				39.362			31.21
							+.20

No. 115.

1899	Mag.	h	m	s	°	′	″
July 18	7	16	29	5.618	−7	56	15.82
20	7			5.550			15.58
				5.584			15.70
							−.04

No. 117.

1900	Mag.	h	m	s	°	′	″
June 25	6	16	31	21.725	−43	11	51.09
26	6½			21.678			47.44
				21.701			49.27
							+1.58

No. 119.

1899	Mag.	h	m	s	°	′	″
July 31	6½	16	31	1.915	−8	38	50.36
Aug. 1	6½			1.895			50.58
				1.905			50.47
							−.03

No. 121.

1899		h	m	s	°	′	″
July 14		16	31	3.002	−2	6	32.70
17				3.080			32.38
				3.041			32.54
							−.08
Obs. Lat. 303					37	20	25.33
Red. Lat.							25.20
							−.16

No. 121.

1900		h	m	s	°	′	″
June 27		16	31	6.213	−2	6	40.31
28				6.203			40.95
				6.208			40.63
							−.08
Obs. Lat. 303					37	20	26.04
Red. Lat.							25.88
							−.16

No. 122.

1899		h	m	s	°	′	″
July 25	7½	16	31	24.577	−6	5	18.14
27	7½			24.570			18.55
				24.573			18.34
							−.05

No. 123.

1899		h	m	s	°	′	″
July 21		16	31	35.749	−10	21	44.80
24				35.728			44.56
				35.738			44.68
							−.02
Obs. Lat. B. J.					37	20	25.18
Red. Lat.							25.07
							−.22

No. 123.

1900	Mag.	h	m	s	°	′	″
May 30		16	31	39.058	−10	21	52.58
June 4				39.050			52.74
				39.054			52.66
							−.02
Obs. Lat. B. J.					37	20	25.62
Red. Lat.							25.46
							−.22

No. 128.

1899		h	m	s	°	′	″
July 18	6½	16	32	37.069	−18	1	2.61
20	6¾			37.027			2.58
				37.048			2.60
							+.05

No. 137.

1899		h	m	s	°	′	″
July 25	6¾	16	34	37.192	−20	12	41.45
27	6½			37.163			41.75
				37.177			41.60
							+.07

No. 138.

1899		h	m	s	°	′	″
July 14	7½	16	34	8.413	−7	18	45.74
17	7			8.484			44.97
				8.448			45.35
							−.04

No. 142.

1899		h	m	s	°	′	″
July 18	7	16	35	26.914	−17	51	44.52
20	7			26.933			44.85
				26.923			44.68
							+.05

No. 143.

1899		h	m	s	°	′	″
July 31		16	35	43.797	−17	32	48.17
Aug. 1				43.801			48.17
				43.799			48.17
							+.04
Obs. Lat. 303					37	20	26.04
Red. Lat.							25.96
							−.28

No. 143.

1900		h	m	s	°	′	″
June 25		16	35	47.240	−17	32	56.02
26				47.234			55.19
				47.237			55.60
							+.04
Obs. Lat. 303					37	20	26.08
Red. Lat.							25.92
							−.28

No. 145.

1900		h	m	s	°	′	″
June 5	6¼	16	36	0.841	−19	43	58.08
19	6¾			0.930			58.14
				0.886			58.11
							+.07

No. 148.

1900	Mag.	h	m	s	°	′	″
May 30	7	16	35	54.997	−2	39	4.40
June 4	7			54.939			4.23
				54.968			4.31
							−.07

No. 150.

1899	Mag.	h	m	s	°	′	″
July 25	6	16	37	42.817	−40	38	58.44
27	6			42.812			59.52
				42.814			58.98
							+.80

No. 157.

1899	Mag.	h	m	s	°	′	″
July 14	8	16	37	45.383	−22	56	20.98
17	8			45.429			20.62
				45.406			20.80
							+.11

No. 159.

1899	Mag.	h	m	s	°	′	″
July 20	6	16	38	41.084	−28	19	17.36
31	6			.107			17.59
Aug. 1	6			.072			17.59
				41.088			17.51
							+.20

No. 162.

1899		h	m	s	°	′	″
July 21	7	16	39	4.074	−22	59	44.97
24	7			4.063			45.62
				4.068			45.29
							+.11

No. 167.

1899		h	m	s	°	′	″
July 14	8	16	41	1.067	−33	30	57.28
17	7½			1.022			58.22
				1.044			57.75
							+.34

No. 168.

1899		h	m	s	°	′	″
July 25	6½	16	40	40.232	−25	20	40.24
27	6¼			40.249			41.11
				40.240			40.67
							+.15

No. 174.

1899		h	m	s	°	′	″
July 18	7	16	42	5.355	−24	20	45.42
20	7			5.337			45.54
				5.346			45.48
							+.13

No. 176.

1899		h	m	s	°	′	″
July 21	7½	16	42	42.763	−33	50	14.53
24	7½			42.734			13.43
				42.748			13.98
							+.35

No. 179.

1900		h	m	s	°	′	″
May 30	7½	16	43	53.597	−41	39	26.70
June 4	7			53.524			26.88
				53.560			26.79
							+1.07

No. 183.

1900	Mag.	h	m	s	°	′	″
June 5	7	16	43	58.375	−38	4	57.40
19	7			58.429			58.69
				58.402			58.04
							+.53

No. 184.

1899							
Aug. 9	3	16	43	37.224	−34	6	35.05
10	3			37.194			33.69
				37.209			34.37
							+.36

No. 185.

1899							
July 31	6	16	43	35.440	−24	27	48.07
Aug. 1	6			35.447			47.61
				35.443			47.84
							+.13

No. 186.

1899							
July 14	6	16	44	31.107	−41	3	24.97
17	6			31.171			25.45
				31.139			25.21
							+.90

No. 188.

1900							
June 25	7	16	45	18.371	−41	41	7.49
26	7			18.235			5.01
				18.303			6.25
							+1.07

No. 189.

1899							
Aug. 9	4	16	45	1.707	−37	52	26.27
10	4			1.686			25.37
				1.696			25.82
							+.52

No. 190.

1899							
July 31	6	16	45	26.676	−40	33	4.00
Aug. 1	6½			26.735			2.31
				26.706			3.15
							+.77

No. 191.

1899							
July 25		16	44	14.660	−10	36	15.56
27				14.723			15.99
				14.691			15.78
							−.02
Obs. Lat. 303						37 20	26.29
Red. Lat.							26.20
							−.22

No. 192.

1899							
Aug. 7	8	16	45	42.324	−41	36	52.65
8	8			42.353			52.77
				42.338			52.71
							+1.05

No. 193.

1899							
July 21	4	16	45	29.537	−37	50	43.34
24	4			29.593			42.43
				29.565			42.88
							+.52

No. 196.

1899	Mag.	h	m	s	°	′	″
July 18	7	16	45	7.098	−16	22	21.67
20	7¼			7.148			21.96
				7.123			21.81
							+.03

No. 198.

1899							
July 14	5	16	46	52.195	−42	11	39.45
17	5			52.157			39.34
				52.176			39.39
							+1.23

No. 199.

1899							
July 25	7	16	46	52.772	−41	49	34.58
27	7			52.834			35.83
				52.803			35.20
							+1.12

No. 200.

1899							
Aug. 9	6	16	46	56.586	−41	38	18.50
10	6½			56.567			16.49
				56.576			17.49
							+1.06

No. 201.

1899							
Aug. 7	7½	16	46	58.270	−41	37	25.51
8	7½			58.322			24.58
				58.296			25.05
							+1.06

No. 202.

1900							
May 30	7	16	47	8.880	−41	39	34.36
June 4	7½			8.876			34.95
				8.878			34.66
							+1.07

No. 203.

1900							
June 5	7½	16	47	10.319	−41	41	1.67
19	7½			10.478			3.05
				10.398			2.36
							+1.08

No. 204.

1900							
June 25	7½	16	47	18.486	−41	39	16.84
26	7½			18.551			17.32
				18.518			17.08
							+1.06

No. 205.

1900							
June 23	6½	16	47	23.055	−42	18	50.87
24	6½			23.096			50.25
				23.076			50.56
							+1.27

No. 206.

1900							
June 27	5	16	47	32.740	−42	11	25.26
28	5			32.766			26.05
				32.753			25.66
							+1.23

No. 209.

1899	Mag.	h	m	s	°	′	″
Aug. 7	7	16	47	56.693	−41	55	30.81
8	7			56.654			30.06
				56.673			30.43
							+1.14

No. 211.

1899							
July 21	7	16	47	50.998	−33	18	28.76
24	7			50.999			28.78
				50.998			28.77
							+.33

No. 214.

1899							
July 31	5	16	47	27.355	−20	14	47.76
Aug. 1	6			27.366			47.71
				27.360			47.73
							+.08

No. 215.

1899							
July 18	6½	16	48	9.284	−30	25	17.00
20	6½			9.259			17.34
				9.271			17.17
							+.25

No. 216.

1899							
Aug. 9	7	16	48	41.156	−39	20	27.28
10	7			41.281			25.81
				41.218			26.55
							+.61

No. 218.

1899							
July 25	6½	16	49	34.131	−40	39	41.89
27	6			34.228			42.89
				34.180			42.39
							+.80

No. 220.

1900							
May 30	6½	16	48	48.168	−23	20	54.42
June 4	6¾			48.099			54.19
				48.134			54.30
							+.12

No. 222.

1900							
June 23	7	16	49	25.871	−33	20	45.66
24	6¾			25.847			45.91
				25.859			45.79
							+.33

No. 226.

1900							
June 5	7½	16	49	10.395	−4	0	3.81
19	7½			10.419			3.49
				10.407			3.65
							−.06

No. 227.

1900							
June 25	5½	16	49	14.924	−5	59	25.30
26	5			14.982			25.43
				14.953			25.37
							−.05

No. 228.

1899	Mag.	h	m	s	°	′	″
July 14	5	16	50	36.114	−33	5	57.41
17	5½			36.094			57.29
				36.104			57.35
							+.32

No. 230.

1900							
June 27	7	16	49	45.772	−6	29	19.60
28	7			45.665			19.80
				45.718			19.70
							−.05

No. 232.

1899							
July 31	6	16	50	11.952	−16	38	43.18
Aug. 1	6			11.950			43.05
				11.951			43.11
							+.03

No. 234.

1899							
Aug. 7		16	50	42.420	−22	59	23.23
8				42.443			23.22
				42.431			23.22
							+.11
Obs. Lat. 303					37	20	25.81
Red. Lat.							25.76
							−.35

No. 234.

1900							
May 30		16	50	46.054	−22	59	30.08
June 4				46.056			29.72
				46.055			29.90
							+.11
Obs. Lat. 303					37	20	26.28
Red. Lat.							26.12
							−.35

No. 235.

1899							
July 21	7	16	50	24.643	−5	57	36.94
24	7			24.665			36.79
				24.654			36.86
							−.05

No. 236.

1899							
July 18	7	16	51	7.811	−19	22	47.22
20	7			7.826			47.79
				7.818			47.50
							+.06

No. 237.

1899							
July 25	6	16	52	2.041	−37	27	46.26
27	5			2.141			47.45
				2.091			46.86
							+.50

No. 244.

1899							
July 21	6¾	16	52	56.862	−14	42	48.38
24	6½			56.889			47.45
				56.876			47.91
							+.02

No. 245.

1899	Mag.	h	m	s	°	′	″
July 31	8	16	53	11.083	−15	39	20.25
Aug. 1	7¾			11.094			20.66
				11.088			20.45
							+.03

No. 248.

1900							
June 25	5½	16	53	50.268	−24	56	26.23
26	6			50.280			25.84
				50.274			26.04
							+.14

No. 249.

1900							
June 27	6	16	54	1.965	−24	50	12.42
28	5½			1.922			12.62
				1.943			12.52
							+.14

No. 250.

1900							
June 5	7¾	16	53	38.966	−15	54	42.40
19	8			38.950			42.00
				38.958			42.20
							+.03

No. 251.

1899							
Aug. 9	6½	16	53	51.380	−18	5	28.66
10	6			51.358			28.04
				51.369			28.35
							+.05

No. 254.

1899							
July 18	8	16	54	21.497	−18	3	42.23
20	8			21.462			42.96
				21.479			42.60
							+.05

No. 255.

1899							
July 31	5	16	55	20.695	−31	59	35.30
Aug. 1	5			20.784			35.85
				20.740			35.57
							+.29

No. 256.

1899							
July 25	7¼	16	54	29.497	−4	4	8.31
27	7			29.459			8.71
				29.478			8.51
							−.06

No. 259.

1900							
June 25	7½	16	55	59.181	−32	6	45.92
26	7½			59.056			46.07
				59.118			45.99
							+.29

No. 260.

1899							
July 21	7	16	55	29.222	−13	24	31.92
24	7			29.255			31.36
				29.238			31.64
							.00

No. 261.

1900	Mag.	h	m	s	°	′	″
June 27	6¼	16	56	0.186	−18	44	18.05
28	6			0.118			18.68
				0.152			18.37
							+.06

No. 263.

1899							
Aug. 9		16	55	43.936	−4	4	15.53
10				43.924			15.61
				43.930			15.57
							−.06
Obs. Lat. 303					37	20	25.12
Red. Lat.							25.08
							−.18

No. 263.

1900							
June 5		16	55	47.113	−4	4	21.64
19				.119			22.04
23				.087			21.84
24				.080			21.84
				47.100			21.84
							−.06
Obs. Lat. 303					37	20	25.75
Red. Lat.							25.59
							−.18

No. 266.

1900							
June 29	7½	16	56	12.410	−6	35	22.57
July 9	7½			12.457			23.16
				12.433			22.87
							−.05

No. 268.

1899							
July 21	5	16	58	10.587	−33	58	50.80
24	5			10.649			49.87
				10.618			50.33
							+.35

No. 269.

1899							
July 18	6½	16	57	47.773	−25	33	13.61
20	6¾			47.782			13.83
				47.777			13.72
							+.15

No. 271.

1899							
July 25	7	16	58	30.679	−25	30	4.98
27	6½			30.713			3.74
				30.696			4.36
							+.15

No. 273.

1899							
July 31	6	16	58	46.214	−20	21	9.92
Aug. 1	6			46.248			9.90
				46.231			9.91
							+.08

No. 274.

1900							
June 5	7¾	16	58	41.280	−17	20	55.24
19	7¾			41.289			55.72
				41.284			55.48
							+.04

No. 277.

1899	Mag.	h	m	s	°	′	″
June 25	6	16	59	0.911	−10	56	52.78
26	6½			0.913			53.22
				0.912			53.00
							−.02

No. 278.

1900	Mag.	h	m	s	°	′	″
June 27	7½	16	59	53.558	−26	26	36.38
28	7			53.521			36.80
				53.540			36.59
							+.17

No. 281.

1899	Mag.	h	m	s	°	′	″
July 14	6	17	0	9.932	−21	25	28.16
17	6			9.856			28.47
				9.894			28.31
							+.09

No. 284.

1899	Mag.	h	m	s	°	′	″
July 18	6	17	0	37.670	−26	22	33.03
20	6½			37.689			34.01
				37.679			33.52
							+.16

No. 288.

1899	Mag.	h	m	s	°	′	″
July 21	7½	17	0	42.977	−12	16	28.43
24	7½			42.976			28.16
				42.976			28.29
							.00

No. 289.

1899	Mag.	h	m	s	°	′	″
Aug. 7	6	17	0	19.802	−0	45	12.56
8	6			19.816			12.56
				19.809			12.56
							−.08

No. 294.

1900	Mag.	h	m	s	°	′	″
June 25	5½	17	3	27.504	−44	25	49.67
26	5½			27.447			45.53
				27.476			47.60
							+2.12

No. 297.

1899	Mag.	h	m	s	°	′	″
July 25	6	17	2	22.877	−17	28	30.75
27	6			22.807			29.25
				22.842			30.00
							+.04

No. 299.

1899	Mag.	h	m	s	°	′	″
July 31	7	17	2	47.180	−11	54	3.29
Aug. 1	7			47.254			3.80
				47.217			3.55
							−.01

No. 300.

1899	Mag.	h	m	s	°	′	″
July 14	8½	17	3	12.666	−17	26	16.92
17	8½			12.721			16.97
				12.693			16.94
							+.04

No. 302.

1900	Mag.	h	m	s	°	′	″
June 25	4	17	4	59.444	−43	6	32.11
26	4			59.443			27.39
				59.443			29.75
							+1.54

No. 303.

1899	Mag.	h	m	s	°	′	″
July 18	6	17	3	0.923	−0	56	45.72
20	6			0.967			46.11
				0.945			45.91
							−.08

No. 305.

1900	Mag.	h	m	s	°	′	″
June 5	7½	17	4	21.835	−19	18	34.50
19	7½			21.837			35.83
				21.836			35.17
							+.06

No. 306.

1899	Mag.	h	m	s	°	′	″
July 21		17	4	35.072	−15	35	58.95
24				35.043			59.76
				35.057			59.35
							+.03
Obs. Lat. B. J.					37	20	25.56
Red. Lat.							25.45
							−.27

No. 306.

1900	Mag.	h	m	s	°	′	″
June 27		17	4	38.487	−15	36	4.09
28				38.472			4.04
				38.480			4.06
							+.03
Obs. Lat. B. J.					37	20	25.75
Red. Lat.							25.59
							−.27

No. 308.

1900	Mag.	h	m	s	°	′	″
June 5	7½	17	5	24.073	−26	34	40.97
19	7½			24.060			41.13
				24.066			41.05
							+.17

No. 309.

1899	Mag.	h	m	s	°	′	″
July 25	7	17	5	4.574	−20	31	28.01
27	6½			4.533			27.09
				4.553			27.55
							+.08

No. 311.

1899	Mag.	h	m	s	°	′	″
July 14	7½	17	5	53.805	−26	54	57.55
17	6½			53.871			57.18
				53.838			57.36
							+.17

No. 1.

1899	Mag.	h	m	s	°	′	″
July 18	8½	17	6	19.035	−26	53	46.05
20	8½			19.026			46.10
				19.030			46.07
							+.17

No. 6.

1899	Mag.	h	m	s	°	′	″
July 21	6½	17	7	56.743	−26	51	48.02
24	6			56.754			48.76
				56.748			48.39
							+.17

No. 9.

1899	Mag.	h	m	s	°	′	″
July 25	5½	17	8	41.404	−33	25	52.73
27	6			41.387			53.23
				41.396			52.98
							+.33

No. 10.

1900	Mag.	h	m	s	°	′	″
June 25	6½	17	9	16.367	−33	37	21.85
26	7			16.215			21.21
				16.291			21.53
							+.34

No. 12.

1899	Mag.	h	m	s	°	′	″
Aug. 7	8½	17	9	1.744	−27	51	10.16
8	8½			1.758			10.35
				1.751			10.25
							+.19

No. 14.

1899	Mag.	h	m	s	°	′	″
July 31	6½	17	8	52.371	−20	51	6.11
Aug. 1	7			52.441			6.08
				52.406			6.09
							+.08

No. 17.

1899	Mag.	h	m	s	°	′	″
July 18	5	17	9	8.085	−26	27	16.23
20	6			8.064			16.37
				8.074			16.30
							+.17

No. 17.

1899	Mag.	h	m	s	°	′	″
Aug. 9	6	17	9	8.169	−26	27	11.42
10	6			8.166			12.49
				8.167			11.95
							+.17

No. 21.

1899	Mag.	h	m	s	°	′	″
July 14	6	17	10	0.705	−26	24	2.27
17	6½			0.675			2.02
				0.690			2.14
							+.17

No. 23.

1899	Mag.	h	m	s	°	′	″
July 21	5½	17	10	29.341	−32	32	54.97
24	5			29.347			54.89
				29.344			54.93
							+.31

No. 27.

1899	Mag.	h	m	s	°	′	″
July 31	6½	17	11	22.914	−26	31	3.48
Aug. 1	7			22.922			2.87
				22.918			3.17
							+.17

No. 28.

1899	Mag.	h	m	s	°	′	″
Aug. 7	6	17	11	45.720	−32	26	36.21
8	6			45.704			35.97
				45.712			36.09
							+.30

No. 31.

1900							
June 5	7½	17	11	54.639	−24	10	30.59
19	7½			54.672			30.64
				54.656			30.61
							+.13

No. 32.

1900							
June 25	5	17	11	54.728	−24	10	41.64
26	5½			54.683			41.39
				54.706			41.51
							+.13

No. 33.

1899							
July 18	6½	17	11	56.958	−23	57	41.11
20	6			56.963			40.89
				56.960			41.00
							+.13

No. 34.

1899							
July 25		17	11	25.496	−0	19	51.91
27				.467			52.09
Aug. 9				.522			52.36
10				.423			52.02
				25.477			52.09
							−.09
Obs. Lat. 303					37	20	25.76
Red. Lat.							25.70
							−.15

No. 34.

1900							
June 27		17	11	28.581	−0	19	57.16
28				28.585			57.35
				28.583			57.25
							−.09
Obs. Lat. 303					37	20	26.78
Red. Lat.							26.62
							−.15

No. 41.

1899							
Aug. 7	7	17	14	14.208	−26	26	43.99
8	7			14.299			44.51
				14.253			44.25
							+.17

No. 43.

1899							
July 25	6	17	14	0.523	−17	39	2.23
27	6½			0.531			2.17
				0.527			2.20
							+.05

No. 45.

1899							
July 14	7	17	13	34.396	−2	42	6.67
17	6½			34.447			6.67
				34.421			6.67
							−.07

No. 46.

1899	Mag.	h	m	s	°	′	″
July 21	7½	17	14	4.562	−2	38	36.13
24	7			4.597			36.28
				4.580			36.21
							−.07

No. 47.

1899							
July 18		17	14	56.946	−21	0	15.45
20				56.951			16.11
				56.948			15.78
							+.08
Obs. Lat. 303					37	20	25.37
Red. Lat.							25.26
							−.32

No. 48.

1899							
July 31	7	17	15	9.458	−26	23	56.09
Aug. 1	7			9.527			56.16
				9.492			56.12
							+.16

No. 51.

1900							
June 25	6	17	15	33.485	−24	48	17.88
26	6			33.502			18.60
				33.493			18.24
							+.14

No. 52.

1899							
Aug. 9	5	17	15	8.778	−12	44	39.21
10	4			8.718			39.53
				8.748			39.37
							.00

No. 53.

1899							
Aug. 7		17	15	48.358	−24	53	55.73
8				48.345			55.82
				48.351			55.77
							+.14
Obs. Lat. B. J.					37	20	26.03
Red. Lat.							25.98
							−.38

No. 54.

1900							
June 5	6	17	16	58.108	−44	4	1.50
19	6			58.162			4.40
				58.135			2.95
							+1.95

No. 55.

1900							
June 5	7¾	17	15	22.509	−12	59	0.48
19	8			22.523			0.38
				22.516			0.43
							.00

No. 57.

1900							
June 27	8	17	16	1.861	−23	2⅜	29.07
28	8¼			1.839			29.20
				1.850			29.13
							+.12

No. 60.

1899	Mag.	h	m	s	°	′	″
July 25	5	17	17	0.157	−28	2	41.66
27	5			0.126			40.66
				0.141			41.16
							+.20

No. 62.

1899							
July 21	7¾	17	16	57.091	−25	0	0.85
24	7¼			57.132			0.15
				57.111			0.50
							+.14

No. 63.

1899							
July 14	8¼	17	16	42.715	−17	36	17.74
Aug. 9	7½			.615			16.87
10	7½			.570			17.32
				42.633			17.31
							+.04

No. 67.

1899							
July 31	7½	17	17	18.795	−19	21	6.04
Aug. 1	7½			18.895			5.84
				18.845			5.94
							+.06

No. 70.

1899							
July 18	7	17	17	54.396	−23	44	54.74
20	6¾			54.334			55.07
				54.365			54.90
							+.12

No. 73.

1899							
July 25	6	17	19	24.444	−45	45	8.90
27	6½			24.560			9.92
				24.502			9.41
							+2.93

No. 76.

1899							
Aug. 7	5½	17	18	39.486	−21	20	49.35
8	5½			39.515			50.16
				39.500			49.75
							+.09

No. 77.

1900							
June 5	6¼	17	18	59.462	−24	9	8.53
19	6¼			59.500			9.20
				59.481			8.87
							+.13

No. 79.

1900							
June 25	7½	17	18	29.070	−9	15	50.70
26	7			29.092			50.52
				29.081			50.61
							−.03

No. 82.

1899							
July 14	8	17	19	46.028	−27	30	. .
17	8			45.979			28.45
Aug. 9	7¼			.991			27.62
10	7			.963			27.92
				45.990			28.00
							+.19

No. 83.

1899	Mag.	h	m	s	°	′	″
July 21	5	17	20	12.036	−24	4	57.00
24	5			11.988			57.22
				12.012			57.11
							+.13

No. 86.

1900							
June 5	6	17	20	58.006	−29	46	36.16
19	5			58.076			36.84
				58.041			36.50
							+.23

No. 88.

1900							
June 25	7	17	20	43.231	−21	22	53.07
26	6½			43.305			52.61
				43.268			52.84
							+.09

No. 89.

1900							
June 27	8½	17	20	44.661	−21	19	33.55
28	8½			.587			34.15
July 3	8			.690			33.51
				44.646			33.74
							+.09

No. 90.

1899							
Aug. 7	6	17	21	11.060	−29	38	11.89
8	6			11.107			12.50
				11.083			12.19
							+.23

No. 91.

1899							
July 18	8	17	20	58.636	−15	2	24.60
20	7½			58.653			25.41
				58.644			25.00
							+.02

No. 98.

1899							
July 25	6	17	21	21.879	−12	25	24.16
27	6			21.915			23.38
				21.897			23.77
							.00

No. 99.

1899							
July 31		17	21	16.247	−4	59	50.33
Aug. 1				16.217			50.41
				16.232			50.37
							−.06
Obs. Lat. 303					37	20	26.19
Red. Lat.							26.11
							−.18

No. 100.

1899							
July 21	7¼	17	22	24.712	−25	25	32.71
24	7¼			24.731			32.74
				24.721			32.72
							+.15

No. 106.

1899	Mag.	h	m	s	°	′	″
July 25	3	17	23	53.748	−37	12	54.56
27	3			53.791			55.91
				53.770			55.23
							+.48

No. 107.

1899							
July 14	8½	17	22	56.156	−9	24	58.84
17	8½			56.164			58.70
				56.160			58.77
							−.03

No. 110.

1899							
July 31	7½	17	23	42.661	−9	54	31.74
Aug. 1	7½			42.667			31.99
				42.664			31.86
							−.02

No. 113.

1899							
Aug. 7	7½	17	24	40.332	−23	45	45.75
8	7½			40.331			45.56
				40.331			45.65
							+.12

No. 114.

1900							
June 5	7½	17	24	44.093	−15	33	26.12
19	7¾			44.078			26.54
				44.086			26.33
							+.02

No. 115.

1900							
June 25		17	25	18.917	−23	53	8.19
26				18.813			7.97
				18.865			8.08
							+.13
Obs. Lat. 303					37	20	26.55
Red. Lat.							26.39
							−.37

No. 117.

1900							
June 27	6¼	17	25	31.773	−26	11	35.52
28	6			31.775			35.71
				31.774			35.61
							+.16

No. 118.

1899							
July 21	7¾	17	24	55.101	−10	0	59.28
24	8			55.100			59.39
				55.100			59.33
							−.02

No. 121.

1899							
July 25	2	17	26	45.056	−37	1	49.46
27	2			44.957			49.31
				45.006			49.38
							+.47

No. 122.

1899	Mag.	h	m	s	°	′	″
July 31	7	17	25	45.293	−2	44	56.75
Aug. 1	7			45.312			56.97
				45.302			56.86
							−.07

No. 125.

1900							
June 25	5½	17	28	12.847	−46	26	18.81
26	5½			12.862			15.96
				12.854			17.38
							+3.48

No. 126.

1899							
July 14	8½	17	26	11.029	−2	27	34.71
17	8			10.910			34.57
				10.969			34.64
							−.07

No. 128.

1899							
Aug. 7	7	17	27	6.395	−17	25	22.89
8	7			6.438			23.17
				6.416			23.03
							+.04

No. 129.

1900							
June 5	8	17	27	6.259	−14	43	7.81
19	8			6.357			7.56
				6.308			7.69
							+.02

No. 131.

1899							
July 21	7½	17	27	29.687	−22	5	58.34
24	7½			29.783			58.32
				29.735			58.33
							+.10

No. 134.

1899							
July 31	7	17	27	55.227	−22	57	31.11
Aug. 1	7			55.258			31.52
				55.242			31.31
							+.11

No. 137.

1899							
Aug. 7	5	17	29	35.424	−38	33	50.04
8	5			35.429			50.35
				35.426			50.19
							+.56

No. 138.

1899							
July 21	3	17	30	3.624	−42	56	1.25
24	3			3.568			0.84
				3.596			1.05
							+1.48

No. 140.

1899							
July 25	6½	17	29	13.795	−21	58	32.66
27	6½			13.841			32.98
				13.818			32.82
							+.10

No. 142.

1899	Mag.	h	m	s	°	′	″
July 18	7½	17	29	22.732	−24	33	31.69
20	7¼			22.691			31.32
				22.711			31.50
							+.13

No. 145.

1899							
July 31	6½	17	30	53.578	−42	49	3.23
Aug. 1	6			53.685			2.18
				53.631			2.71
							+1.43

No. 152.

1899							
Aug. 9	7	17	31	5.867	−18	55	36.65
10	7½			5.811			36.38
				5.839			36.51
							+.06

No. 156.

1899							
Aug. 7	6	17	31	48.403	−15	30	33.55
8	6			48.393			33.32
				48.398			33.43
							+.02

No. 157.

1899							
July 25		17	31	48.108	−15	20	6.01
27				48.116			5.82
				48.112			5.92
							+.02
Obs. Lat. B. J.					37	20	25.78
Red. Lat.							25.69
							−.26

No. 157.

1900							
June 5		17	31	51.616	−15	20	8.28
19				.606			9.12
25				.600			8.32
26				.632			8.88
27				.568			8.63
28				.580			8.37
				51.600			8.60
							+.02
Obs. Lat. B. J.					37	20	25.61
Red. Lat.							25.45
							−.26

No. 159.

1899							
July 21	7½	17	33	2.257	−32	15	43.05
24	7			2.313			43.67
				2.285			43.36
							+.30

No. 160.

1899							
July 18	6	17	32	40.676	−21	51	10.21
20	5½			40.690			9.83
				40.683			10.02
							+.09

No. 161.

1899	Mag.	h	m	s	°	′	″
July 14		17	32	21.266	−8	3	25.98
17				21.267			26.39
				21.266			26.18
							−.04
Obs. Lat. 303					37	20	26.01
Red. Lat.							25.88
							−.20

No. 162.

1899							
July 31	6½	17	33	26.046	−32	8	38.64
Aug. 1	6½			26.112			38.20
				26.079			38.42
							+.29

No. 167.

1899							
July 25	7½	17	34	23.500	−32	9	34.27
27	7½			23.555			34.46
				23.527			34.36
							+.29

No. 170.

1899							
Aug. 9	7¾	17	33	51.098	−11	12	34.61
10	7½			51.009			35.08
				51.053			34.85
							−.01

No. 172.

1900							
June 5	8	17	35	7.186	−32	3	34.24
19	8			7.190			34.69
				7.188			34.47
							+.29

No. 173.

1899							
Aug. 7	8	17	34	40.120	−23	46	54.07
8	8			40.129			54.57
				40.124			54.32
							+.12

No. 174.

1899							
July 21	4	17	35	29.962	−38	58	40.03
24	3			29.976			39.53
				29.969			39.78
							+.58

No. 179.

1899							
July 31	5	17	35	59.536	−36	53	40.31
Aug. 1	5½			59.654			40.05
				59.595			40.18
							+.47

No. 182.

1900							
June 25	7	17	34	48.996	−0	35	2.70
26	6½			48.975			2.91
				48.986			2.80
							−.08

No. 184.

1899	Mag.	h	m	s	°	′	″
July 18		17	35	44.247	−12	49	16.59
20				.238			16.74
Aug. 9				.251			16.92
10				.233			16.49
				44.242			16.68
							.00
Obs. Lat. 303					37	20	25.93
Red. Lat.							25.86
							−.24

No. 186.

1899							
July 25	7	17	36	56.157	−27	50	6.66
27	6			56.184			7.01
				56.170			6.83
							+.19

No. 187.

1899							
July 14	8	17	35	52.016	−1	20	36.94
17	8¼			51.989			36.52
				52.002			36.73
							−.08

No. 188.

1899							
Aug. 7	7	17	36	52.240	−15	30	34.78
8	7			52.246			34.98
				52.243			34.88
							+.02

No. 192.

1900							
June 25	5	17	37	26.228	−21	38	4.96
26	5			26.213			4.37
				26.220			4.67
							+.09

No. 195.

1899							
July 21	6½	17	38	18.449	−22	8	57.75
24	6½			18.525			57.14
				18.487			57.45
							+.10

No. 197.

1899							
July 18	8½	17	38	36.859	−21	58	42.11
20	8¼			36.837			42.13
				36.848			42.12
							+.10

No. 202.

1899							
July 31	6½	17	38	19.953	−7	1	58.31
Aug. 1	6			19.953			58.74
				19.953			58.52
							−.04

No. 208.

1899							
July 14	7½	17	39	42.703	−26	55	50.01
17	7½			42.697			49.40
				42.700			49.70
							+.17

No. 210.

1899	Mag.	h	m	s	°	′	″
July 25	4	17	40	31.170	−40	5	16.26
27	4			31.207			18.25
				31.188			17.26
							+.67

No. 217.

1899							
July 21	5	17	41	12.097	−27	47	32.07
24	5			12.099			31.89
				12.098			31.98
							+.19

No. 221.

1899							
July 31	7	17	41	32.565	−18	4	7.91
Aug. 1	7			32.603			9.29
				32.584			8.60
							+.05

No. 223.

1899							
July 18	6½	17	42	8.850	−26	56	19.62
20	6			8.830			19.86
				8.840			19.74
							+.17

No. 227.

1899							
Aug. 7	5	17	42	36.784	−31	40	7.23
8	5			36.800			6.01
				36.792			6.62
							+.28

No. 228.

1900							
June 27	6	17	43	11.499	−40	3	29.93
28	5½			11.500			30.45
				11.500			30.19
							+.66

No. 229.

1900							
June 25	4	17	43	3.100	−37	0	44.14
26	4			3.096			42.09
				3.098			43.11
							+.47

No. 231.

1899							
July 14	7	17	42	46.830	−30	33	43.73
17	7			46.805			44.47
				46.817			44.10
							+.25

No. 236.

1899							
July 31	6	17	44	26.300	−40	44	29.87
Aug. 1	5½			26.411			31.09
				26.356			30.48
							+.82

No. 238.

1899							
July 21	7	17	44	1.975	−27	1	45.71
24	7			2.056			44.99
				2.016			45.35
							+.18

No. 240.

1899	Mag.	h	m	s	°	′	″
Aug. 14	7	17	43	4.521	−1	46	23.66
15	7			4.529			23.95
				4.525			23.80
							−.08

No. 243.

1899							
Aug. 7	7	17	44	42.490	−30	31	39.25
8	7			42.467			37.67
				42.478			38.46
							+.25

No. 245.

1899							
Aug. 14	5½	17	45	29.526	−34	46	17.90
15	6			29.594			17.70
				29.560			17.80
							+.38

No. 247.

1899							
July 18	7	17	44	59.936	−22	53	22.71
20	7			59.896			22.17
				59.916			22.44
							+.11

No. 248.

1900							
June 27	6½	17	45	41.058	−34	23	23.33
28	6½			40.970			24.58
				41.014			23.96
							+.37

No. 249.

1900							
June 25	7½	17	45	33.254	−23	38	59.50
26	7½			33.254			59.65
				33.254			59.57
							+.12

No. 250.

1899							
July 25	6½	17	46	7.448	−34	5	20.48
27	6½			7.424			21.24
				7.436			20.86
							+.36

No. 251.

1899							
Aug. 18	7½	17	45	45.069	−19	44	54.35
21	7½			45.134			54.00
				45.101			54.18
							+.07

No. 253.

1899							
July 14	7	17	45	50.192	−19	29	44.59
17	7			50.190			44.25
				50.191			44.42
							+.07

No. 254.

1899							
July 21	6	17	46	38.967	−34	52	13.71
24	6			38.924			12.81
				38.946			13.26
							+.38

No. 256.

1899	Mag.	h	m	s	°	′	″
July 31	6½	17	47	1.375	−34	45	44.36
Aug. 1	6½			1.391			45.04
				1.383			44.70
							+.38

No. 257.

1899							
Aug. 10	7½	17	46	22.170	−19	5	41.31
14	7			.249			41.95
15	7			.229			41.81
				22.216			41.69
							+.06

No. 258.

1899							
Aug. 7	6½	17	47	10.761	−34	43	45.77
8	6½			10.699			46.05
				10.730			45.91
							+.38

No. 263.

1899							
Aug. 18	8½	17	47	25.346	−18	51	9.17
21	8			25.380			8.67
				25.363			8.92
							+.06

No. 264.

1899							
July 18	7	17	47	47.830	−19	51	52.05
20	7			47.827			51.90
				47.828			51.97
							+.07

No. 265.

1900							
June 25	6½	17	47	30.177	−10	52	29.96
26	6			30.156			30.28
				30.166			30.12
							−.02

No. 267.

1899							
July 25	6	17	48	40.995	−24	52	0.62
27	6			40.998			1.64
				40.996			1.13
							+.14

No. 268.

1899							
July 14	8½	17	48	52.633	−22	57	40.77
17	8½			52.560			40.74
				52.596			40.75
							+.11

No. 269.

1899							
Aug. 18	7	17	49	58.542	−41	57	47.49
21	6½			58.573			46.57
				58.557			47.03
							+1.16

No. 270.

1899							
Aug. 9	6	17	48	30.028	−11	18	57.89
10	6½			30.001			57.31
				30.014			57.60
							−.01

No. 272.

1900	Mag.	h	m	s	°	′	″
June 25	5	17	50	41.465	−41	42	11.22
26	5			41.387			9.62
				41.426			10.42
							+1.08

No. 274.

1899	Mag.	h	m	s	°	′	″
Aug. 14	6½	17	48	49.584	−1	35	51.97
15	6¾			49.519			51.97
				49.551			51.97
							−.08

No. 275.

1900	Mag.	h	m	s	°	′	″
June 27	7	17	50	51.848	−41	55	49.41
28	7			51.803			48.95
				51.826			49.18
							+1.15

No. 276.

1899	Mag.	h	m	s	°	′	″
July 31	7	17	49	17.439	−11	36	48.87
Aug. 1	7			17.380			49.15
				17.410			49.01
							−.01

No. 277.

1899	Mag.	h	m	s	°	′	″
July 21		17	49	58.467	−18	47	3.63
24				.471			3.66
Aug. 14				.466			3.49
15				.476			3.67
				58.470			3.61
							+.06
Obs. Lat. 303					37	20	26.24
Red. Lat.							26.18
							−.30

No. 279.

1899	Mag.	h	m	s	°	′	″
Aug. 7	7	17	50	16.505	−21	56	19.53
8	7			16.461			19.61
				16.483			19.57
							+.10

No. 281.

1899	Mag.	h	m	s	°	′	″
Aug. 9	6½	17	50	30.382	−15	47	39.43
10	6			30.368			39.83
				30.375			39.63
							+.03

No. 283.

1899	Mag.	h	m	s	°	′	″
July 18	7	17	50	57.065	−23	55	29.11
20	6½			57.103			28.37
				57.084			28.74
							+.12

No. 284.

1899	Mag.	h	m	s	°	′	″
July 25	7	17	50	59.706	−15	40	8.16
27	7½			59.744			8.01
				59.725			8.08
							+.03

No. 290.

1899	Mag.	h	m	s	°	′	″
Aug. 18	8	17	51	29.437	−18	55	30.22
21	8			29.523			29.37
				29.480			29.79
							+.06

No. 293.

1899	Mag.	h	m	s	°	′	″
July 31	5½	17	51	27.678	−4	4	1.65
Aug. 1	5			27.684			2.69
				27.681			2.17
							−.06

No. 294.

1899	Mag.	h	m	s	°	′	″
July 14	6	17	52	36.072	−30	14	33.38
17	6½			36.074			33.74
				36.073			33.56
							+.24

No. 297.

1899	Mag.	h	m	s	°	′	″
Aug. 7	7½	17	52	50.667	−16	50	47.21
8	7			50.684			47.64
				50.676			47.42
							+.04

No. 299.

1899	Mag.	h	m	s	°	′	″
Aug. 9	5	17	53	37.506	−23	48	23.66
10	5			37.512			24.24
				37.509			23.95
							+.12

No. 302.

1900	Mag.	h	m	s	°	′	″
June 26	6½	17	54	3.678	−24	16	34.41
29	6½			.668			34.09
July 9	6½			.663			34.69
				3.670			34.39
							+.13

No. 303.

1899	Mag.	h	m	s	°	′	″
July 31		17	53	27.951	−9	45	39.95
Aug. 1				27.912			40.93
				27.931			40.44
							−.02
Obs. Lat. B. J.					37	20	26.01
Red. Lat.							25.93
							−.22

No. 304.

1900	Mag.	h	m	s	°	′	″
June 27	6¼	17	54	3.203	−20	19	53.98
28	6½			3.151			54.64
				3.177			54.31
							+.08

No. 305.

1899	Mag.	h	m	s	°	′	″
July 25	7	17	53	42.102	−5	2	18.30
27	7			42.146			18.77
				42.124			18.53
							−.06

No. 307.

1899	Mag.	h	m	s	°	′	″
Aug. 18	6	17	54	14.851	−4	48	39.99
21	6			14.915			39.82
				14.883			39.90
							−.06

No. 308.

1899	Mag.	h	m	s	°	′	″
July 18	8½	17	55	8.639	−18	4	6.86
20	8			8.640			6.72
				8.639			6.79
							+.05

No. 310.

1900	Mag.	h	m	s	°	′	″
June 25	7	17	55	37.428	−22	7	42.93
26	7¼			37.404			42.51
				37.416			42.72
							+.10

No. 311.

1899	Mag.	h	m	s	°	′	″
Aug. 9	6	17	55	30.990	−17	9	9.95
10	6			30.986			10.19
				30.988			10.07
							+.04

No. 312.

1899	Mag.	h	m	s	°	′	″
July 14	6	17	55	47.189	−22	46	39.19
17	6			47.204			39.12
				47.196			39.15
							+.11

No. 313.

1899	Mag.	h	m	s	°	′	″
Aug. 7	5	17	55	8.784	−3	41	1.20
8	4			8.791			1.28
				8.787			1.24
							−.07

No. 317.

1899	Mag.	h	m	s	°	′	″
July 25	7¼	17	55	55.031	−19	6	12.66
27	7			55.056			12.72
				55.043			12.69
							+.06

No. 319.

1899	Mag.	h	m	s	°	′	″
July 31	7	17	56	27.257	−24	15	15.41
Aug. 1	7			27.318			16.10
				27.287			15.75
							+.13

No. 320.

1899	Mag.	h	m	s	°	′	″
Aug. 18	7	17	56	24.140	−22	54	15.56
21	6¾			24.205			15.61
				24.172			15.58
							+.11

No. 321.

1900	Mag.	h	m	s	°	′	″
June 28	6	17	56	43.383	−24	16	54.61
29	6			.387			54.06
July 9	6			.408			54.19
				43.393			54.28
							+.13

No. 323.

1899	Mag.	h	m	s	°	′	″
Aug. 22	6	17	56	35.714	−20	44	11.45
24	6			35.689			11.50
				35.701			11.47
							+.08

No. 325.

1899							
Aug. 7	7	17	57	27.447	−34	3	18.76
8	7			27.482			18.20
				27.464			18.48
							+.35

No. 326.

1899							
Aug. 14	6	17	56	54.781	−22	43	6.73
15	6½			54.682			6.93
				54.731			6.83
							+.11

A. G. C. 24538.

1900							
June 27		17	57	10.325	−26	19	12.98
							+.16

No. 330.

1899							
July 24		17	57	29.763	−23	8	22.01
Aug. 9	8			.772			21.80
10	8			.787			21.90
				29.774			21.90
							+.11

No. 332.

1900							
June 25	6	17	57	44.654	−24	21	46.89
26	6½			44.531			45.89
				44.592			46.39
							+.13

No. 333.

1900							
June 27	6½	17	57	49.047	−24	18	53.60
28	7			49.131			54.29
				49.089			53.94
							+.13

No. 334.

1899							
Aug. 14	7	17	57	48.595	−22	50	22.15
15	7			48.586			23.31
				48.590			22.73
							+.11

No. 337.

1899							
Aug. 18	6	17	57	34.802	−8	10	48.86
21				34.884			48.22
				34.843			48.54
							−.04

No. 338.

1899							
July 25	8	17	58	2.779	−19	27	41.14
27	8¼			2.824			40.54
				2.801			40.84
							+.07

No. 339.

1899	Mag.	h	m	s	°	′	″
July 31	5	17	58	34.069	−29	35	4.27
Aug. 1	5			34.130			4.60
				34.100			4.43
							+.23

No. 341.

1899							
Aug. 9	5½	17	59	31.683	−43	25	45.69
10	5½			31.610			49.03
				31.646			47.36
							+1.67

No. 342.

1899							
July 14	7	17	58	58.841	−24	24	13.02
17	7			58.871			13.95
				58.856			13.48
							+.13

No. 343.

1899							
Aug. 7		17	59	19.157	−30	25	31.26
8				.151			31.27
22				.115			[29.25]
24				.130			30.82
25				.118			31.15
Sep. 4				.135			31.50
				19.134			31.20
							+.25
Obs. Lat. B. J.					37	20	25.44
Red. Lat.							25.31
							−.49

No. 346.

1899							
Aug. 18	8¼	18	0	22.225	−43	24	8.38
21	8			22.238			9.15
				22.231			8.76
							+1.66

No. 348.

1899							
Aug. 22	6	18	1	1.088	−45	46	45.84
24	6½			1.081			42.90
				1.084			44.37
							+2.95

No. 351.

1899							
July 18	7½	18	0	22.476	−28	22	19.84
20	7			22.437			19.44
				22.456			19.64
							+.20

No. 354.

1899							
Aug. 9	7	18	2	23.221	−44	57	35.44
10	7			23.234			35.97
				23.227			35.71
							+2.42

No. 355.

1899							
July 21	8	18	1	31.125	−31	0	48.88
24	7½			31.171			48.49
				31.148			48.68
							+.26

No. 356.

1899	Mag.	h	m	s	°	′	″
July 31	6½	18	1	7.859	−21	27	14.52
Aug. 1	6			7.866			15.53
				7.862			15.02
							+.09

No. 357.

1899							
July 25	6	18	0	37.209	−8	19	54.35
27	6			37.238			53.99
				37.223			54.17
							−.04

No. 359.

1899							
Aug. 14	5	18	1	41.147	−28	28	5.57
15	5			41.116			5.24
				41.131			5.40
							+.20

No. 360.

1899							
Aug. 18	7¾	18	1	37.976	−21	52	20.01
21	7¾			38.014			19.43
				37.995			19.72
							+.10

No. 361.

1899							
Aug. 14	5	18	3	44.064	−45	58	23.13
15	5½			43.987			21.04
				44.026			22.08
							+3.09

No. 364.

1899							
Aug. 7	6½	18	2	35.032	−21	27	48.83
8	6½			35.067			48.53
				35.050			48.68
							+.09

No. 365.

1899							
July 14	8	18	2	58.643	−26	7	20.55
17	7½			58.602			20.14
				58.622			20.34
							+.16

No. 366.

1899							
July 25	7	18	3	7.127	−24	0	13.18
27	7			7.116			13.60
				7.121			13.39
							+.13

No. 367.

1899							
July 18	6	18	3	34.996	−30	44	40.51
20	5½			34.990			41.06
				34.993			40.78
							+.27

No. 375.

1899							
July 21	8	18	3	56.903	−23	47	25.15
24	8			56.848			25.24
				56.876			25.19
							+.12

No. 377.

1899	Mag.	h	m	s	°	′	″
Aug. 9	7½	18	4	17.105	−26	3	3.41
10	7¼			17.135			3 57
				17.120			3.49
							+.16

No. 378.

1899							
July 31	7	18	3	21.784	−2	55	20.07
Aug. 1	6½			21.802			21.05
				21.793			20.56
							−.07

No. 383.

1899							
Aug. 7	6½	18	4	49.609	−25	46	56.96
8	7			49.610			56.76
				49.609			56.86
							+.15

No. 386.

1899							
Aug. 22	5½	18	5	33.453	−23	43	17.95
24	5½			33.498			18.14
				33.476			18.05
							+.12

No. 5.

1899							
Aug. 22	6	18	8	31.164	−44	14	15.36
24	6			31.177			14.91
				31.170			15.13
							+2.04

No. 7.

1899							
July 18		18	7	43.361	−21	5	7.07
20				.375			6.79
Aug. 18				.323			6.94
21				.315			7.18
				43.343			7.00
							+.09
Obs. Lat. B. J.					37	20	25.45
Red. Lat.							25.40
							−.33

No. 8.

1899							
July 21	6	18	8	11.819	−21	44	23.98
24	6			11.839			23.97
				11.829			23.97
							+.09

No. 9.

1899							
Aug. 7	7½	18	9	1.804	−33	7	17.75
8	7½			1.839			17.20
				1.821			17.47
							+.32

No. 12.

1899							
July 25	8¼	18	8	55.803	−24	1	38.81
27	8			55.742			39.28
				55.772			39.04
							+.13

No. 14.

1899	Mag.	h	m	s	°	′	″
Aug. 9	5	18	9	11.395	−20	45	29.29
10	5½			11.330			29.78
				11.362			29.53
							+.08

No. 15.

1899							
Aug. 18	6	18	9	12.283	−20	25	5.23
21	6			12.310			4.79
				12.296			5.01
							+.08

No. 16.

1899							
Aug. 14	6½	18	10	21.357	−38	12	42.70
15	7			21.300			42.54
				21.328			42.62
							+.54

No. 17.

1899							
July 21	4	18	10	47.574	−36	47	30.90
24	4			47.513			31.65
				47.543			31.27
							+.46

No. 20.

1899							
July 18	7	18	10	34.342	−20	34	39.38
20	6½			34.278			39.43
				34.310			39.40
							+.08

No. 21.

1899							
July 25	6½	18	10	59.684	−28	19	11.28
27	6½			59.683			10.75
				59.683			11.01
							+.20

No. 22.

1899							
Aug. 9	7½	18	11	46.376	−37	15	40.82
10	7¼			46.367			41.84
				46.371			41.33
							+.49

No. 24.

1899							
Aug. 7	5	18	11	43.844	−27	4	45.14
8	4½			43.832			45.10
				43.838			45.12
							+.18

No. 25.

1899							
July 14	6	18	11	33.036	−18	29	56.56
17				33.020			56.06
				33.028			56.31
							+.05

No. 26.

1899							
July 31	7½	18	11	41.338	−19	42	29.22
Aug. 1	7			41.297			30.00
				41.317			29.61
							+.07

No. 27.

1899	Mag.	h	m	s	°	′	″
Aug. 14	7	18	12	26.147	−12	16	47.93
15	7			26.141			48.40
				26.144			48.16
							.00

No. 28.

1899							
July 18	7	18	14	14.802	−39	3	52.89
20	7			14.877			52.97
				14.839			52.93
							+.59

No. 29.

1899							
July 21	8	18	13	12.729	−16	41	46.02
24	8			12.793			46.73
				12.761			46.37
							+.04

No. 32.

1899							
July 25	4	18	14	31.727	−29	52	16.11
27	3			31.682			15.46
				31.704			15.78
							+.24

No. 33.

1899							
July 14	7	18	14	45.277	−30	59	6.89
17	7			45.313			7.13
				45.295			7.01
							+.26

No. 34.

1899							
Aug. 7	5	18	15	20.698	−38	42	9.72
8	5			20.752			9.35
				20.725			9.53
							+.56

No. 36.

1899							
Aug. 22	7½	18	16	17.173	−42	22	13.76
24	7½			17.216			12.61
				17.194			13.18
							+1.29

No. 37.

1899							
Aug. 14	6	18	16	2.468	−36	42	59.70
15	6			2.493			60.10
				2.480			59.90
							+.46

No. 38.

1899							
Aug. 25	8	18	15	24.774	−16	25	13.40
Sep. 4	7½			24.774			13.38
				24.774			13.39
							+.03

No. 39.

1899							
Aug. 14	6	18	16	57.413	−44	9	39.20
15	6			57.448			37.41
				57.430			38.30
							+2.00

No. 40.

1899	Mag.	h	m	s	°	′	″
Aug. 18	8¼	18	15	29.477	−16	25	8.31
21	8½			29.505			8.26
				29.491			8.28
							+.03

1899 **No. 41.**

Aug. 9	7¾	18	16	3.556	−26	27	48.31
10	8			3.637			48.55
				3.596			48.43
							+.17

1899 **No. 42.**

July 25	6	18	16	39.694	−36	17	14.49
27	6			39.672			14.29
				39.683			14.39
							+.44

1899 **No. 43.**

July 31	7½	18	15	58.949	−16	22	14.82
Aug. 1	7½			58.926			15.18
				58.937			15.00
							+.03

1899 **No. 44.**

Aug. 7	7	18	17	21.518	−34	23	4.47
8	7			21.579			4.05
				21.548			4.26
							+.37

1899 **No. 46.**

July 18	3	18	17	28.104	−34	25	57.28
20	3			28.072			56.71
				28.088			57.00
							+.37

1899 **No. 48.**

July 21		18	16	4.976	−2	55	30.81
24				.999			31.24
Sep. 5				.900			30.40
7				.876			30.63
				4.938			30.77
							−.07
Obs. Lat. B. J.					37	20	25.96
Red. Lat.							25.94
							−.17

1899 **No. 50.**

July 25	4	18	19	29.049	−46	1	26.94
27	5			29.160			29.15
				29.104			28.04
							+3.13

1899 **No. 52.**

July 14	5	18	18	31.916	−30	48	28.98
17	5			31.926			29.21
				31.921			29.09
							+.26

No. 58.

1899	Mag.	h	m	s	°	′	″
July 21	5	18	19	20.081	−20	35	44.40
24	5			20.105			45.05
				20.093			44.72
							+.08

1899 **No. 59.**

July 31	7¾	18	18	36.311	−1	11	53.17
Aug. 1	7½			36.357			53.46
				36.334			53.31
							−.08

1899 **No. 60.**

July 31	7	18	20	52.474	−33	28	12.92
Aug. 1	7			52.485			13.22
				52.480			13.07
							+.33

1899 **No. 66.**

July 25	4	18	21	44.231	−25	28	38.72
27	4			44.262			39.37
				44.246			39.04
							+.15

1899 **No. 68.**

July 14		18	22	43.372	−25	6	19.54
17	8½			43.404			20.58
				43.388			20.06
							+.14

1899 **Anon.**

July 31	8½	18	23	3.314	−33	34	21.51
							+.34

1899 **No. 69.**

Aug. 1	7½	18	23	20.801	−33	36	47.41
7				.732			47.52
8	8			.763			47.12
				20.765			47.35
							+.34

1899 **No. 70.**

Aug. 22	5½	18	23	52.098	−41	58	49.79
24	6			52.186			49.90
				52.142			49.85
							+1.16

1899 **No. 71.**

Aug. 14	8	18	23	22.756	−33	33	37.95
15	8			22.732			38.74
				22.744			38.34
							+.34

1899 **No. 72.**

Aug. 18	7¼	18	23	23.744	−33	6	48.43
21	7¼			23.833			48.38
				23.788			48.40
							+.32

No. 73.

1899	Mag.	h	m	s	°	′	″
Sep. 5	5½	18	24	16.578	−45	58	59.07
7	5			16.514			60.46
				16.546			59.76
							+3.10

1899 **No. 75.**

Aug. 9	6¾	18	23	8.161	−25	19	14.69
10	6			8.154			15.19
				8.157			14.94
							+.15

1899 **No. 76.**

Aug. 18	6	18	24	33.747	−45	49	36.24
21	5½			33.685			38.24
				33.716			37.24
							+2.99

1899 **No. 79.**

Aug. 14	6	18	24	27.313	−33	3	21.63
15	6			27.281			21.39
				27.297			21.51
							+.32

1899 **No. 81.**

July 25	8½	18	24	13.689	−24	7	47.53
27	8½			13.672			47.86
				13.680			47.70
							+.13

1899 **No. 82.**

Aug. 25	6	18	24	15.612	−18	47	35.02
Sep. 4	6			15.610			34.78
				15.611			34.90
							+.06

1899 **No. 85.**

Aug. 25	5	18	26	17.493	−42	23	7.64
Sep. 4	5			17.451			7.56
				17.472			7 60
							+1.29

1899 **No. 86.**

Aug. 9	6	18	24	25.550	−2	3	1.51
10	6			25.561			1.84
				25.556			1.67
							−.08

1899 **No. 87.**

July 14	8	18	25	46.206	−33	0	36.01
17	7½			46.262			36.22
				46.234			36.11
							+.32

1899 **No. 88.**

July 21	7	18	25	23.471	−18	58	21.67
24	6½			23.499			22.07
				23.485			21.87
							+.07

No. 89.

1899	Mag.	h	m	s	°	′	″
July 25	7	18	26	25.185	−38	47	33.85
27	7			25.250			34.04
				25.217			33.94
							+.57

No. 90.

1899							
Sep. 5	6	18	26	25.219	−38	47	52.29
7	6			25.094			55.62
				25.156			53.95
							+.57

No. 91.

1899							
July 31	7½	18	25	28.620	−18	19	55.97
Aug. 1	7½			28.583			56.91
				28.601			56.44
							+.05

No. 92.

1899							
Aug. 7	6	18	25	31.157	−18	28	18.86
8	5½			31.140			18.67
				31.148			18.76
							+.05

No. 94.

1899							
Aug. 22	6½	18	25	56.393	−19	11	44.59
24	6½			56.366			44.23
				56.380			44.41
							+.06

No. 95.

1899							
July 18	7	18	26	32.601	−19	2	40.99
20	6½			32.568			40.97
				32.584			40.98
							+.06

No. 96.

1899							
Aug. 25	6	18	27	20.243	−33	5	28.80
Sep. 4	6			20.119			28 96
				20.181			28.88
							+.32

No. 97.

1899							
Sep. 5	7½	18	27	27.774	−33	2	10.41
7	7½			27.728			10.53
				27.751			10.47
							+.32

No. 99.

1899							
Aug. 18	7	18	27	3.902	−24	10	59.86
21	6			3.928			59.71
				3.915			59.78
							+.13

No. 101.

1899							
Aug. 14	6	18	26	57.264	−14	56	18.89
15	5½			57.258			19.29
				57.261			19.09
							+.02

No. 102.

1899	Mag.	h	m	s	°	′	″
Aug. 22	7	18	27	15.095	−18	26	32.28
24	6½			15.101			31.96
				15.098			32.12
							+.05

Anon.

1899							
July 31	7½	18	27	25.019	−24	8	55.51
Aug. 1	7½			24.980			55.47
				25.000			55.49
							+.13

No. 103.

1899							
Aug. 7	7½	18	27	37.037	−24	11	54.43
8	7½			37.068			54.19
				37.052			54.31
							+.13

No. 104.

1899							
Aug. 9	6½	18	26	44.042	−1	4	28.36
10	6			44.015			28.44
				44.028			28.40
							−.08

No. 105.

1899							
July 21	6	18	27	43.226	−24	6	27.07
24	5			43.314			28.01
				43.270			27.54
							+.13

No. 107.

1899							
Aug. 14	6½	18	27	52.853	−14	55	43.28
15	6½			52.811			42.80
				52.832			43.04
							+.02

No. 108.

1899							
Aug. 18	7	18	28	21.972	−24	17	57.99
21	6½			22.054			57.63
				22.013			57.81
							+.13

No. 109.

1899							
Aug. 22	7½	18	28	49.475	−32	58	11.88
24	7			49.545			10.20
				49.510			11.04
							+.32

No. 110.

1899							
Aug. 9	6½	18	29	19.625	−20	55	10.06
10	6½			19.652			9.92
				19.638			9.99
							+.08

No. 111.

1899							
Aug. 7	7	18	29	16.458	−17	3	51.02
8	7			16.426			51.24
				16.442			51.13
							+.04

No. 112.

1899	Mag.	h	m	s	°	′	″
July 18	6	18	29	26.203	−19	20	50.36
20	6½			26.148			50.49
				26.176			50.42
							+.06

No. 114.

1899							
July 14		18	29	25.586	−11	3	21.22
17				·575			21.55
Aug. 14				·593			21.20
15				·536			20.78
				25.572			21.18
							−.01
Obs. Lat. 303						37	20 25.64
Red. Lat.							25.56
							−.23

No. 115.

1899							
July 31	5	18	29	42.587	−8	18	52.62
Aug. 1	5			42.565			53.64
				42.576			53.13
							−.04

No. 117.

1899							
July 21	8½	18	30	44.872	−29	19	13.46
24	8½			44.915			13.08
				44.893			13.27
							+.22

No. 118.

1899							
Aug. 9	7½	18	30	51.401	−29	33	24.91
10	7½			51.442			25.39
				51.421			25.15
							+.23

No. 120.

1899							
Sep. 5	8	18	30	49.848	−17	17	21.53
7	7½			49.872			21.94
				49.860			21.73
							+.04

No. 121.

1899							
Aug. 14	6	18	31	10.056	−19	17	33.65
15	6¾			9.900			34.03
				9.978			33.84
							+.06

No. 122.

1899							
Aug. 22	7½	18	31	52.133	−33	33	56.05
24	7½			52.114			53.86
				52.123			54.95
							+.34

No. 123.

1899							
Aug. 25	7	18	30	41.466	−6	49	23.79
Sep. 4	7			41.399			23.98
				41.432			23.88
							−.05

No. 125.

1899	Mag.	h	m	s	°	′	″
Aug. 18	6½	18	31	51.523	−21	28	52.82
21	6			51.549			52.44
				51.536			52.63
							+.09

No. 128.

1899							
July 25	6¾	18	31	59.617	−17	18	59.60
27	6¼			59.599			59.70
				59.608			59.65
							+.04

No. 129.

1899							
July 18		18	32	22.151	−23	35	27.84
20				.120			27.45
Aug. 7				.069			27.55
8				.104			27.95
25				.128			27.97
Sep. 4				.155			27.24
				22.121			27.66
							+.12
Obs. Lat. 303						37	20 25.92
Red. Lat.							25.87
							−.36

No. 130.

1899							
July 31	7½	18	32	14.143	−7	25	11.78
Aug. 1	7½			14.158			12.16
				14.150			11.97
							−.04

No. 131.

1899							
July 14	6	18	32	52.042	−21	8	7.14
17	6			51.984			7.24
				52.013			7.19
							+.09

No. 136.

1899							
July 31	7½	18	34	31.377	−30	37	13.20
Aug. 1	7½			31.396			14.14
				31.386			13.67
							+.25

No. 138.

1899							
July 21	6½	18	33	58.595	−2	2	24.48
24	7			58.624			25.24
				58.610			24.86
							−.08

No. 140.

1899							
July 25	7½	18	35	9.559	−14	35	55.33
27	7½			9.583			55.17
				9.571			55.25
							+.02

No. 141.

1899							
July 18	6	18	35	41.993	−23	55	38.91
20	6			41.983			39.01
				41.988			38.96
							+.12

No. 142.

1899	Mag.	h	m	s	°	′	″
July 31	5	18	36	51.295	−38	25	13.93
Aug. 1	5½			51.254			14.34
				51.274			14.13
							+.55

No. 144.

1899							
July 14	6½	18	35	57.257	−14	39	33.11
17	6½			57.289			33.08
				57.273			33.09
							+.02

No. 146.

1899							
Aug. 9	5½	18	37	33.451	−35	44	27.68
10	5½			33.508			29.13
				33.480			28.41
							+.42

No. 147.

1899							
Aug. 18	6	18	37	56.249	−39	47	14.40
21	6			56.269			14.86
				56.259			14.63
							+.64

No. 148.

1899							
Aug. 22	7½	18	37	58.411	−39	50	47.29
24	7½			58.386			46.82
				58.398			47.05
							+.64

No. 149.

1899							
July 21	5	18	36	44.564	−9	8	56.51
24	5			44.605			56.68
				44.584			56.59
							−.03

No. 152.

1899							
Aug. 7	6½	18	36	50.093	−7	26	1.75
8	7			50.027			2.12
				50.060			1.93
							−.04

No. 155.

1899							
July 18	6	18	38	37.060	−25	6	43.28
20	5½			37.052			43.95
				37.056			43.61
							+.14

No. 157.

1899							
July 25		18	38	1.214	−8	22	29.92
27				.174			29.76
Aug. 14				.223			29.84
15				.182			30.09
Sep. 5				.183			29.74
7				.132			29.63
				1.185			29.83
							−.03
Obs. Lat. 303						37	20 26.01
Red. Lat.							26.00
							−.21

No. 158.

1899	Mag.	h	m	s	°	′	″
Aug. 25	6½	18	38	4.018	−8	28	2.40
Sep. 4	7			4.017			3.36
				4.017			2.88
							−.03

No. 159.

1899							
July 14	4	18	39	20.765	−27	5	40.63
17	4			20.782			40.75
				20.773			40.69
							+.18

No. 161.

1899							
Aug. 22	5½	18	40	40.968	−40	30	49.08
24	6			41.014			49.10
				40.991			49.09
							+.76

No. 162.

1899							
July 21	6½	18	40	3.285	−19	42	41.15
24	6½			3.331			41.98
				3.308			41.56
							+.07

No. 164.

1899							
Aug. 9	6	18	40	15.139	−22	29	52.51
10	6			15.131			52.48
				15.135			52.49
							+.10

No. 166.

1899							
Aug. 25	6	18	41	33.213	−43	47	25.60
Sep. 4	6½			33.192			24.85
				33.202			25.22
							+1.83

No. 168.

1899							
July 25	8½	18	40	8.695	−3	20	7.62
27	8			8.655			8.80
				8.675			8.21
							−.07

No. 169.

1899							
July 21	6	18	42	19.120	−43	32	45.99
24	6½			19.022			44.65
				19.071			45.32
							+1.72

No. 171.

1899							
Aug. 7	7½	18	40	36.911	−6	21	28.29
8	7½			36.898			28.78
				36.904			28.53
							−.05

No. 175.

1899							
July 18	7	18	41	52.808	−20	23	1.79
20	7			52.801			1.79
				52.804			1.79
							+.08

No. 176.

1899	Mag.	h	m	s	°	′	″
Aug. 14	6½	18	41	15.640	−1	4	5.60
15	6½			15.588			5.07
				15.614			5.33
							−.08

No. 177.

1899							
July 31		18	41	48.927	−4	51	21.41
Aug. 1				.928			21.74
18				.902			21.64
21				.885			21.26
22				.877			21.69
24				.915			21.03
				48.906			21.46
							−.06
Obs. Lat. 303					37	20	26.29
Red. Lat.							26.27
							−.18

No. 180.

1899							
July 14	8	18	42	51.408	−20	15	55.03
17	8			51.404			55.47
				51.406			55.25
							+.08

No. 185.

1899							
July 25	5	18	43	40.506	−20	26	21.78
27	5			40.510			21.62
				40.508			21.70
							+.08

No. 191.

1899							
July 31	7	18	44	20.252	−26	53	9.95
Aug. 1	7			20.246			9.11
				20.249			9.53
							+.17

No. 194.

1899							
July 18	8	18	44	35.462	−22	22	57.32
20	8			35.433			57.66
				35.447			57.49
							+.10

No. 196.

1899							
July 21		18	44	46.238	−22	16	40.22
24				.237			40.12
Aug. 9				.201			39.71
10				.243			40.46
25				.247			39.69
Sep. 4				.210			40.18
				46.229			40.06
							+.10
Obs. Lat. 303					37	20	26.56
Red. Lat.							26.52
							−.34

No. 197.

1899							
Aug. 8	6½	18	44	16.601	−6	1	37.65
14	6½			.693			37.42
15	6			.587			37.17
				16.627			37.41
							−.05

No. 201.

1899	Mag.	h	m	s	°	′	″
Aug. 18	6	18	45	24.973	−9	53	29.06
21	6			25.107			29.85
				25.040			29.45
							−.02

No. 202.

1899							
July 14	6	18	46	4.344	−22	2	23.83
17	6			4.405			23.46
				4.374			23.64
							+.10

No. 204.

1899							
July 25	8½	18	45	42.863	−6	23	49.14
27	8			42.842			49.00
				42.852			49.07
							−.05

No. 205.

1899							
Aug. 22	7	18	45	47.607	−3	22	38.70
24	6¾			47.582			39.43
				47.594			39.06
							−.07

No. 206.

1899							
Aug. 7	6	18	46	3.875	−3	26	9.44
8	6			3.868			9.37
				3.871			9.41
							−.07

No. 208.

1899							
July 31	8	18	47	0.828	−19	14	26.40
Aug. 1	8			0.825			26.70
				0.826			26.55
							+.06

No. 210.

1899							
July 18	5½	18	47	57.926	−21	29	0.05
20	5½			57.974			0.45
				57.950			0.25
							+.09

No. 211.

1899							
July 21	5	18	48	4.336	−22	52	9.14
24	5			4.293			9.57
				4.314			9.35
							+.11

No. 217.

1899							
July 25	7	18	49	1.658	−29	20	24.83
27	6½			1.691			25.19
				1.674			25.01
							+.22

No. 218.

1899	Mag.	h	m	s	°	′	″
July 14		18	49	0.156	−26	25	19.61
17				.125			19.10
Aug. 7				.179			20.24
8				.129			20.06
18				.164			19.54
21				.137			19.44
22				.134			20.28
24				.188			19.54
				0.151			19.73
							+.17
Obs. Lat. B. J.					37	20	24.98
Red. Lat.							24.94
							−.41

No. 219.

1899							
Aug. 9	5	18	49	0.796	−22	47	50.71
10	5			0.779			50.84
				0.787			50.77
							+.11

No. 222.

1899							
Aug. 14	6	18	49	49.643	−37	28	19.57
15	6			49.568			20.04
				49.606			19.80
							+.50

No. 225.

1899							
July 31	6	18	49	53.742	−23	18	8.32
Aug. 1	6			53.797			8.23
				53.770			8.27
							+.12

No. 228.

1899							
July 21	7½	18	50	27.279	−23	16	34.33
24	7½			27.356			34.07
				27.317			34.20
							+.12

No. 230.

1899							
July 31	5	18	51	54.666	−37	14	20.69
Aug. 1	5			54.706			20.36
				54.686			20.52
							+.49

No. 231.

1899							
July 18	5½	18	51	20.350	−20	47	18.08
20	5			20.330			17.45
				20.340			17.76
							+.08

No. 233.

1899							
Aug. 7	4	18	51	42.304	−21	14	21.85
8	4			42.267			21.71
				42.286			21.78
							+.09

No. 238.

1899	Mag.	h	m	s	°	′	″
July 14	7½	18	52	11.263	−20	33	28.60
17	7			11.295			28.28
				11.279			28.44
							+.08

No. 240.

1899	Mag.	h	m	s	°	′	″
July 25	5	18	51	39.183	−5	58	38.10
27	5			39.212			38.29
				39.197			38.20
							−.05

No. 246.

1899	Mag.	h	m	s	°	′	″
July 21	8	18	53	39.631	−28	11	18.21
24	7¼			39.690			18.48
				39.660			18.35
							+.20

No. 250.

1899	Mag.	h	m	s	°	′	″
Aug. 22	5½	18	55	57.778	−42	14	18.55
24	5¾			57.796			20.27
				57.787			19.41
							+1.25

No. 251.

1899	Mag.	h	m	s	°	′	″
July 18	7½	18	54	20.411	−2	58	24.95
20	7¼			20.478			24.94
				20.444			24.94
							−.07

No. 253.

1899	Mag.	h	m	s	°	′	″
July 31	7½	18	55	17.130	−23	22	12.32
Aug. 1	7½			17.214			13.10
				17.172			12.71
							+.12

No. 255.

1899	Mag.	h	m	s	°	′	″
July 14		18	55	32.435	−22	50	16.23
17	6			32.465			16.02
				32.450			16.12
							+.11

No. 257.

1899	Mag.	h	m	s	°	′	″
July 21	3	18	56	11.201	−30	1	27.68
24	3			11.166			28.17
				11.183			27.92
							+.24

No. 260.

1899	h	m	s	°	′	″
July 25	18	55	47.192	−15	25	30.34
27			.231			29.95
Aug. 9			.207			30.43
10			.200			30.38
			47.208			30.27
						+.02
Obs. Lat. 303				37	20	26.09
Red. Lat.						26.03
						−.26

No. 261.

1899	Mag.	h	m	s	°	′	″
Aug. 7	6	18	56	16.754	−24	59	10.00
8	5½			16.791			10.47
				16.772			10.23
							+.14

No. 265.

1899	Mag.	h	m	s	°	′	″
Aug. 18	5	18	56	17.153	−5	52	52.47
21	5			17.173			51.93
				17.163			52.20
							−.05

No. 267.

1899	Mag.	h	m	s	°	′	″
July 25	6	18	57	55.937	−31	11	43.13
27	5½			55.982			42.81
				55.960			42.97
							+.27

No. 272.

1899	Mag.	h	m	s	°	′	″
Aug. 22	6½	18	57	35.323	−3	50	43.24
24	6			35.324			42.92
				35.323			43.08
							−.07

No. 274.

1899	Mag.	h	m	s	°	′	″
July 18	8	18	57	32.301	−0	51	13.28
20	8			32.325			12.59
				32.313			12.93
							−.08

No. 275.

1899	Mag.	h	m	s	°	′	″
July 31	8½	18	57	33.626	−0	51	26.20
Aug. 1	8½			33.661			26.98
				33.643			26.59
							−.08

No. 277.

1899	Mag.	h	m	s	°	′	″
July 20	8¼	18	58	37.995	−24	57	55.49
24	8			38.004			55.85
				38.000			55.67
							+.14

No. 278.

1899	Mag.	h	m	s	°	′	″
July 14		18	58	37.874	−21	53	22.54
17	4			37.882			22.38
				37.878			22.46
							+.10

No. 280.

1899	Mag.	h	m	s	°	′	″
July 31	5	18	59	35.534	−37	12	30.67
Aug. 1	5½			35.546			30.67
				35.540			30.67
							+.48

No. 282.

1899	Mag.	h	m	s	°	′	″
Aug. 7	7½	18	59	26.943	−24	49	36.09
8	7			26.952			36.30
				26.947			36.19
							+.14

No. 284.

1899	Mag.	h	m	s	°	′	″
Aug. 9	7¾	18	58	46.910	−0	56	34.77
10	7½			46.911			35.07
				46.910			34.92
							−.08

No. 286.

1899	Mag.	h	m	s	°	′	″
Aug. 22	7¾	19	0	1.508	−27	26	24.42
24	7½			1.535			24.17
				1.521			24.29
							+.18

No. 289.

1899	Mag.	h	m	s	°	′	″
Aug. 18	6	18	59	37.556	−4	10	53.99
21	6			37.655			53.73
				37.606			53.86
							−.06

No. 291.

1899	Mag.	h	m	s	°	′	″
Aug. 7	5	19	1	19.027	−40	39	12.98
8	5			19.110			12.22
				19.068			12.60
							+.80

No. 292.

1899	Mag.	h	m	s	°	′	″
July 25	4	19	0	38.136	−27	49	4.65
27	4			38.083			5.10
				38.110			4.87
							+.19

No. 293.

1899	Mag.	h	m	s	°	′	″
July 21	6	19	1	9.304	−28	47	32.43
24	6			9.246			33.05
				9.275			32.74
							+.21

No. 294.

1899	Mag.	h	m	s	°	′	″
Aug. 9	6½	19	0	53.817	−22	39	8.79
10	6½			53.822			8.30
				53.820			8.55
							+.11

No. 295.

1899	Mag.	h	m	s	°	′	″
Aug. 14	7	19	0	2.835	−1	5	14.11
15	7			2.834			14.37
				2.834			14.24
							−.08

No. 298.

1899	h	m	s	°	′	″
July 18	19	0	53.298	−5	2	2.49
20			·335			2.71
Sept. 5			.289			2.07
7			·345			2.56
			53.317			2.46
						−.06
Obs. Lat. B. J.				37	20	25.67
Red. Lat.						25.65
						−.18

No. 300.

1899	Mag.	h	m	s	°	′	″
July 31	5	19	2	36.182	−38	3	41.95
Aug. 1	5			36.171			42.88
				36.176			42.41
							+.53

No. 301.

1899	Mag.	h	m	s	°	′	″
July 14		19	2	4.343	−24	48	54.14
17	6½			4.378			54.18
				4.360			54.16
							+.14

No. 305.

1899	Mag.	h	m	s	°	′	″
Aug. 9	5	19	3	4.909	−39	30	4.34
10	5			4.974			4.27
				4.941			4.31
							+.62

No. 306.

1899	Mag.	h	m	s	°	′	″
Aug. 18	7½	19	1	52.326	−5	3	15.90
21	7¾			52.389			16.28
				52.357			16.09
							−.06

No. 310.

1899	Mag.	h	m	s	°	′	″
Aug. 7	7	19	3	26.995	−27	16	30.19
8	7			27.043			30.07
				27.019			30.13
							+.18

No. 313.

1899	Mag.	h	m	s	°	′	″
July 25	8	19	2	51.613	−5	29	28.53
27	8			51.657			28.59
				51.635			28.56
							−.05

No. 315.

1899	Mag.	h	m	s	°	′	″
July 21		19	3	45.440	−21	11	2.89
24				.473			2 79
Aug. 14				.375			3.71
15				.486			3.05
22				.452			3.12
24				.395			3.03
				45.437			3.10
							+.09
Obs. Lat. B. J.					37	20	25.22
Red. Lat.							25.18
							−.33

No. 316.

1899	Mag.	h	m	s	°	′	″
July 18	6	19	3	50.772	−19	57	46.93
20	6			50.758			47.12
				50.765			47.02
							+.07

No. 323.

1899	Mag.	h	m	s	°	′	″
July 31	7	19	4	35.834	−7	26	19.60
Aug. 1	7			35.876			19.98
				35.855			19.79
							−.04

No. 324.

1899	Mag.	h	m	s	°	′	″
July 14		19	5	20.743	−20	30	44.32
17	8			20.796			44.29
				20.769			44.31
							+.08

No. 1.

1899	Mag.	h	m	s	°	′	″
Aug. 14	6½	19	7	18.921	−45	21	52.29
15	7			18.837			54.45
				18.879			53.37
							+2.66

No. 4.

1899	Mag.	h	m	s	°	′	″
July 21	6½	19	6	25.919	−21	49	32.48
24	6			25.954			32.35
				25.936			32.41
							+.09

No. 5.

1899	Mag.	h	m	s	°	′	″
July 25	7	19	6	10.406	−14	45	5.41
27	6½			10.415			5.44
				10.410			5.42
							+.02

No. 7.

1899	Mag.	h	m	s	°	′	″
July 18	6	19	7	0.421	−26	4	33.65
20	6			0.353			33.98
				0.387			33.81
							+.16

No. 10.

1899	Mag.	h	m	s	°	′	″
Aug. 7	7½	19	7	10.317	−20	35	28.73
8	7½			10.334			29.05
				10.326			28.89
							+.08

No. 12.

1899	Mag.	h	m	s	°	′	″
Aug. 9	8	19	7	34.700	−22	44	11.82
10	8			34.718			11.61
				34.709			11.71
							+.11

No. 15.

1899	Mag.	h	m	s	°	′	″
Aug. 14	6	19	9	0.678	−45	38	34.50
15	6½			0.532			35.41
				0.605			34.96
							+2.85

No. 16.

1899	Mag.	h	m	s	°	′	″
July 31		19	7	11.944	−8	6	29.80
Aug. 1				11.964			29.59
18				12.019			29.99
21				11.985			30.05
				11.978			29.86
							−.04
Obs. Lat. 303					37	20	25.92
Red. Lat.							25.88
							−.20

No. 18.

1899	Mag.	h	m	s	°	′	″
July 14		19	8	30.027	−18	4	24.94
17	8			30.042			24.69
				30.034			24.81
							+.05

No. 20.

1899	Mag.	h	m	s	°	′	″
July 21	7½	19	8	59.838	−17	31	12.44
24	7½			.808			13.04
Aug. 22	7½			.846			11.98
24	7¾			.805			12.41
				59.824			12.47
							+.04

No. 21.

1899	Mag.	h	m	s	°	′	″
July 25	5½	19	9	20.881	−25	25	50.99
27	5			20.860			51.26
				20.870			51.12
							+.15

No. 22.

1899	Mag.	h	m	s	°	′	″
July 31	6	19	9	24.031	−24	21	5.39
Aug. 1	6			24.120			5.76
				24.076			5.57
							+.13

No. 25.

1899	Mag.	h	m	s	°	′	″
Aug. 7	8	19	9	29.380	−19	57	40.97
8	7½			29.328			40.61
				29.354			40.79
							+.07

No. 28.

1899	Mag.	h	m	s	°	′	″
July 18	8	19	9	57.684	−15	0	47.93
20	7½			57.713			48.02
				57.698			47.97
							+.02

No. 32.

1899	Mag.	h	m	s	°	′	″
Aug. 18	7½	19	11	14.904	−21	15	3.03
21	7			14.906			2.84
				14.905			2.93
							+.09

No. 33.

1899	Mag.	h	m	s	°	′	″
Aug. 14	7	19	11	15.662	−11	9	1.53
15	6½			15.626			1.27
				15.644			1.40
							−.01

No. 34.

1899	Mag.	h	m	s	°	′	″
Aug. 9	8½	19	10	59.348	−2	50	36.44
10	8½			59.325			36.98
				59.336			36.71
							−.07

No. 35.

1899	Mag.	h	m	s	°	′	″
July 14		19	11	43.547	− 19	7	57.77
17				.516			57.70
Aug. 25				.506			57.29
Sep. 4				.501			57.82
				43.517			57.64
							+.06
Obs. Lat. 303					37	20	26.00
Red. Lat.							25.95
							−.30

No. 36.

1899							
July 21	7	19	12	36.253	− 37	4	37.11
24	7			36.210			35.15
				36.231			36.13
							+.48

No. 39.

1899							
July 25	7	19	12	16.571	− 19	2	41.09
27	6½			16.539			41.15
				16.555			41.12
							+.06

No. 43.

1899							
July 31	7	19	12	35.776	− 18	52	44.76
Aug. 1	7			35.785			44.95
				35.780			44.85
							+.06

No. 47.

1899							
Aug. 7	7½	19	12	34.575	− 11	37	44.82
8	7			34.583			44.50
				34.579			44.66
							−.01

No. 48.

1899							
Aug. 18	7¼	19	13	54.249	− 38	55	56.06
21	7			54.197			58.31
				54.223			57.18
							+.58

No. 50.

1899							
July 18	6	19	13	14.559	− 15	42	43.04
20	6			14.573			43.42
				14.566			43.23
							+.03

No. 53.

1899							
Aug. 9	8	19	13	23.794	− 11	6	47.18
10	8			23.732			47.60
				23.763			47.39
							−.01

No. 54.

1899							
Aug. 22	5	19	15	22.657	− 44	38	56.20
24	5			22.679			56.37
				22.668			56.28
							+2.24

No. 59.

1899	Mag.	h	m	s	°	′	″
Aug. 7	7	19	14	33.025	− 24	23	37.39
8	7			33.075			37.14
				33.050			37.26
							+.13

No. 60.

1899							
Aug. 14	6	19	13	40.914	+ 0	9	17.86
15	6½			40.829			18.38
				40.871			18.12
							−.09

No. 61.

1899							
July 25	6	19	14	34.913	− 22	35	24.75
27	6			34.997			24.48
				34.955			24.61
							+.11

No. 62.

1899							
Aug. 18	5	19	15	55.347	− 44	59	24.92
21	5½			55.382			27.22
				55.364			26.07
							+2.43

No. 66.

1899							
July 14		19	15	9.414	− 5	36	16.15
17	5½			9.434			16.49
				9.424			16.32
							−.05

No. 67.

1899							
July 21	6½	19	15	42.000	− 19	25	24.11
24	6½			42.086			24.12
				42.043			24.11
							+.06

No. 68.

1899							
Aug. 25	5	19	16	53.375	− 40	48	23.05
Sep. 4	5			53.453			23.88
				53.414			23.46
							+.83

No. 69.

1899							
Aug. 25	5	19	15	48.864	− 18	2	13.64
Sep. 4	5			48.876			14.29
				48.870			13.96
							+.05

No. 70.

1899							
July 18	5½	19	15	57.421	− 18	29	44.87
20	6			57.400			44.38
				57.410			44.62
							+.05

No. 71.

1899							
Aug. 9		19	15	56.489	− 16	8	39.92
10				56.580			40.24
				56.534			40.08
							+.03
Obs. Lat. 303					37	20	25.56
Red Lat.							25.52
							−.27

No. 72.

1899	Mag.	h	m	s	°	′	″
July 31	5	19	15	22.926	− 1	4	47.75
Aug. 1	5½			22.972			48.48
				22.949			48.11
							−.08

No. 77.

1899							
Aug. 14	7	19	17	10.688	− 35	9	39.42
15	7			10.633			37.80
				10.660			38.61
							+.39

No. 79.

1899							
Aug. 14	6½	19	15	53.520	− 1	21	54.96
15	6½			53.451			54.65
				53.486			54.80
							−.08

No. 82.

1899							
Aug. 22	8	19	16	41.308	− 19	12	53.02
24	8			41.292			53.52
				41.300			53.27
							+.06

No. 83.

1899							
July 25	8	19	16	47.455	− 6	14	10.87
27	7½			47.453			11.05
				47.454			10.96
							−.05

No. 84.

1899							
July 14	6	19	18	12.437	− 28	3	39.72
17	6			12.443			40.36
				12.440			40.04
							+.20

No. 85.

1899							
Aug. 18	7	19	17	14.982	− 3	54	34.95
21	7½			15.016			34.57
				14.999			34.76
							−.06

No. 86.

1899							
July 31	7	19	17	35.387	− 10	53	47.45
Aug. 1	6½			35.379			47.76
				35.383			47.61
							−.02

No. 92.

1899							
July 21	7½	19	18	35.443	− 19	7	24.72
24	7½			35.505			24.80
				35.474			24.76
							+.06

No. 93.

1899							
July 18	5	19	19	7.772	− 24	42	17.14
20	5½			7.732			16.75
				7.752			16.94
							+.14

No. 94.

1899	Mag.	h	m	s	°	′	″
July 25	7	19	19	14.280	−24	36	35.43
27	6½			14.234			34.93
				14.257			35.18
							+.14

No. 96.

1899							
Aug. 22	6	19	19	22.934	−24	9	36.51
24	6			22.853			36.86
				22.893			36.68
							+.13

No. 97.

1899							
Aug. 9	7	19	18	51.824	−9	31	59.60
10	7			51.829			60.25
				51.826			59.92
							−.03

No. 100.

1899							
Aug. 25	7½	19	19	39.792	−14	43	25.65
Sep. 4	7½			39.838			26.12
				39.815			25.88
							+.02

No. 102.

1899							
Aug. 7	6	19	20	33.539	−29	56	34.94
8	6			33.576			35.25
				33.557			35.09
							+.24

No. 103.

1899							
Aug. 9	6	19	20	17.696	−21	58	35.73
10	6			17.742			35.88
				17.719			35.81
							+.10

No. 104.

1899							
Aug. 22	7	19	20	27.950	−21	26	44.44
24	7			27.810			44.28
				27.880			44.36
							+.09

No. 107.

1899							
Aug. 18	6	19	20	26.227	−15	15	11.91
21	6			26.245			11.35
				26.236			11.63
							+.02

No. 109.

1899							
July 31	8	19	20	7.917	−3	55	53.82
Aug. 1	8½			8.008			53.61
				7.962			53.71
							−.06

No. 110.

1899							
Aug. 25	7	19	20	40.795	−14	45	4.72
Sep. 4	7			40.825			5.71
				40.810			5.21
							+.02

No. 111.

1899	Mag	h	m	s	°	′	″
Aug. 14	8	19	20	22.687	−2	15	38.11
15	7½			22.710			37.98
				22.698			38.04
							−.07

No. 118.

1899							
July 21	5	19	21	21.075	+0	8	14.59
24	5			21.102			14.47
				21.088			14.53
							−.09

No. 122.

1899							
July 18	8½	19	22	7.720	−2	13	25.89
20	8			7.777			25.81
				7.748			25.85
							−.07

No. 124.

1899							
July 25	7	19	22	50.753	−15	18	27.97
27	6			50.754			27.45
				50.753			27.71
							+.02

No. 126.

1899							
July 31	6	19	23	37.352	−27	11	32.16
Aug. 1	6½			37.353			33.00
				37.352			32.58
							+.18

No. 130.

1899							
Aug. 7	8	19	23	43.605	−21	32	45.59
8	8			43.621			45.96
				43.613			45.77
							+.09

No. 132.

1899							
July 21	7	19	23	48.607	−15	33	58.88
24	7			48.625			58.67
				48.616			58.77
							+.02

No. 136.

1899							
Aug. 7	6	19	26	4.884	−45	29	10.73
8	6			4.897			10.20
				4.890			10.46
							+2.74

No. 138.

1899							
Aug. 9	6	19	24	54.345	−21	31	19.62
10	6			54.402			19.92
				54.373			19.77
							+.09

No. 143.

1899							
July 18	8	19	24	59.656	−3	23	34.09
20	8			59.668			33.61
				59.662			33.85
							−.07

No. 145.

1899	Mag.	h	m	s	°	′	″
July 25		19	25	22.880	−2	59	57.71
27				.880			57.59
Aug. 14				.791			57.65
15				.886			57.62
18				.830			57.62
21				.885			57.43
				22.859			57.60
							−.07
Obs. Lat. 303						37	20 25.89
Red. Lat.							25.85
							−.17

No. 147.

1899							
July 31	7	19	26	15.629	−21	43	49.13
Aug. 1	7			15.660			50.38
				15.644			49.75
							+.09

No. 155.

1899							
July 21	8½	19	27	41.904	−18	49	48.42
24	7½			41.940			49.16
				41.922			48.79
							+.06

No. 159.

1899							
July 18	6½	19	28	28.087	−24	4	38.52
20	6½			28.158			38.85
				28.122			38.68
							+.13

No. 165.

1899							
July 25	7	19	29	34.459	−23	31	49.40
27	7½			34.453			48.98
				34.456			49.19
							+.12

No. 166.

1899							
Aug. 7	7	19	29	37.241	−20	59	55.21
8	6½			37.226			55.12
				37.233			55.16
							+.08

No. 168.

1899							
Aug. 14	6	19	29	53.793	−24	56	26.19
15	6			53.684			25.51
				53.738			25.85
							+.14

No. 170.

1899							
Aug. 9	5	19	29	33.327	−10	46	51.12
10	5½			33.339			51.01
				33.333			51.06
							−.02

No. 174.

1899							
July 31		19	30	33.668	−25	6	23.80
Aug. 1				33.710			23.50
				33.689			23.65
							+.14
Obs. Lat. B. J.						37	20 25.86
Red. Lat.							25.78
							−.38

No. 176.

1899	Mag.	h	m	s	°	′	″
July 21	6	19	30	32.808	− 19	4	31.76
24	6			32.912			32.73
				32.860			32.25
							+.06

No. 177.

1899	Mag.	h	m	s	°	′	″
Aug. 18	8	19	30	15.700	− 10	35	13.44
21	7¾			15.656			13.43
				15.678			13.43
							−.02

No. 179.

1899	Mag.	h	m	s	°	′	″
Aug. 22	7	19	30	35.216	− 2	40	36.08
24	7			35.204			35.84
				35.210			35.96
							−.07

No. 180.

1899	Mag.	h	m	s	°	′	″
Aug. 14	6	19	31	11.675	− 18	27	19.33
15	6			11.707			19.61
				11.691			19.47
							+.05

No. 181.

1899	Mag.	h	m	s	°	′	″
Sep. 5	7½	19	30	55.716	− 3	1	46.39
7	7¾			55.772			46.60
				55.744			46.49
							−.07

No. 182.

1899	Mag.	h	m	s	°	′	″
Aug. 9	7½	19	30	50.232	− 0	7	15.35
10	7½			50.265			15.65
				50.248			15.50
							−.09

No. 183.

1899	Mag.	h	m	s	°	′	″
Aug. 25	7	19	30	50.773	+ 0	1	37.02
Sep. 4	7½			50.798			36.08
				50.786			36.55
							−.09

No. 185.

1899	Mag.	h	m	s	°	′	″
July 18	8½	19	31	14.104	− 10	39	36.02
20	8¼			14.100			35.98
				14.102			36.00
							−.02

No. 186.

1899	Mag.	h	m	s	°	′	″
Aug. 18	7	19	31	17.939	− 10	22	53.08
21	7			17.864			52.69
				17.901			52.88
							−.02

No. 187.

1899	Mag.	h	m	s	°	′	″
Aug. 7		19	31	27.403	− 7	15	7.49
8				27.405			7.73
				27.404			7.61
							−.04
Obs. Lat. 303					37	20	26.43
Red. Lat.							26.38
							−.20

No. 188.

1899	Mag.	h	m	s	°	′	″
Aug. 22	5	19	31	29.771	− 1	30	37.19
24	5			29.738			38.35
				29.754			37.77
							−.08

No. 194.

1899	Mag.	h	m	s	°	′	″
July 25	7½	19	32	5.591	− 0	43	4.08
27	7			5.572			3.91
				5.581			4.00
							−.08

No. 196.

1899	Mag.	h	m	s	°	′	″
Aug. 25	6½	19	32	25.876	− 4	52	22.32
Sep. 4	6			25.820			22.74
				25.848			22.53
							−.06

No. 198.

1899	Mag.	h	m	s	°	′	″
Aug. 9	7	19	32	22.453	− 0	21	22.08
10	7			22.508			22.52
				22.480			22.30
							−.09

No. 199.

1899	Mag.	h	m	s	°	′	″
Sep. 5	7	19	33	45.238	− 23	39	26.13
7	7			45.264			26.67
				45.251			26.40
							+.12

No. 200.

1899	Mag.	h	m	s	°	′	″
July 21	7½	19	33	1.289	− 0	43	1.04
24	7½			1.224			0.89
				1.256			0.96
							−.08

No. 201.

1899	Mag.	h	m	s	°	′	″
Aug. 7	6	19	34	2.888	− 23	39	36.33
8	6			2.809			36.27
				2.848			36.30
							+.12

No. 202.

1899	Mag.	h	m	s	°	′	″
July 31	7	19	33	11.536	+ 0	7	0.60
Aug. 1	7			11.567			0.69
				11.551			0.65
							−.09

No. 204.

1899	Mag.	h	m	s	°	′	″
July 18	8	19	34	18.162	− 23	33	47.57
20	8			18.204			46.76
				18.183			47.16
							+.12

No. 205.

1899	Mag.	h	m	s	°	′	″
July 25	7½	19	34	12.994	− 20	46	44.57
27	6½			12.942			44.45
				12.968			44.51
							+.08

No. 210.

1899	Mag.	h	m	s	°	′	″
Aug. 14	8¼	19	34	9.382	− 1	41	53.70
15	8¼			9.361			53.07
				9.371			53.38
							−.08

No. 213.

1899	Mag.	h	m	s	°	′	″
Aug. 9	7½	19	34	36.965	− 8	12	22.13
10	7¼			36.973			22.47
				36.969			22.30
							−.04

No. 214.

1899	Mag.	h	m	s	°	′	″
Aug. 18	6	19	34	56.192	− 16	31	29.70
21	5½			56.232			29.06
				56.212			29.38
							+.03

No. 218.

1899	Mag.	h	m	s	°	′	″
July 31	7½	19	36	49.776	− 33	53	2.47
Aug. 1	7			49.853			2.30
				49.814			2.38
							+.35

No. 219.

1899	Mag.	h	m	s	°	′	″
July 21	6	19	35	31.131	− 0	15	18.26
24	6			31.213			19.03
				31.173			18.65
							−.08

No. 222.

1899	Mag.	h	m	s	°	′	″
July 25	6	19	36	44.477	− 16	21	37.43
27	5			44.536			37.69
				44.506			37.56
							+.03

No. 230.

1899	Mag.	h	m	s	°	′	″
Aug. 7	6	19	37	47.958	− 15	42	14.39
8	5½			47.968			14.76
				47.963			14.57
							+.03

No. 231.

1899	Mag.	h	m	s	°	′	″
July 18	7½	19	37	37.379	− 10	54	51.43
20	7½			37.408			51.82
				37.393			51.62
							−.02

No. 232.

1899	Mag.	h	m	s	°	′	″
July 21	7½	19	38	39.443	− 32	1	45.83
24	7½			39.496			46.07
				39.470			45.95
							+.29

No. 237.

1899	Mag.	h	m	s	°	′	″
July 31	6½	19	39	0.655	− 31	8	43.17
Aug. 1	6½			0.652			43.49
				0.653			43.33
							+.27

No. 243.

1899	Mag.	h	m	s	°	′	″
Aug. 9	6	19	39	34.604	−32	9	7.65
10	5½			34.668			7.55
				34.636			7.60
							+.27

No. 245.

1899							
July 25	8	19	39	10.029	−11	26	6.22
27	8			9.953			5.30
				9.991			5.76
							−.01

No. 249.

1899							
July 18		19	40	28.221	−20	0	14.58
20				.206			14.35
Aug. 7				.249			14.57
8				.194			14.05
22				.223			14.28
24				.228			14.64
25				.191			14.06
Sep. 4				.238			13.96
				28.219			14.31
							+.07
Obs. Lat. 303					37	20	25.90
Red. Lat.							25.87
							−.31

No. 260.

1899							
July 21	7	19	42	2.805	−21	12	22.80
24	7			2.851			22.75
				2.828			22.77
							+.09

No. 265.

1899							
July 25	6	19	42	22.576	−13	57	7.51
27	6			22.556			7.30
				22.566			7.40
							+.01

No. 266.

1899							
Aug. 14	8	19	43	41.339	−42	6	47.47
15	8			41.258			47.55
				41.298			47.51
							+1.20

No. 271.

1899							
July 31	6	19	43	13.061	−12	34	11.10
Aug. 1	6			13.015			10.94
				13.038			11.02
							.00

No. 273.

1899							
Aug. 7	5½	19	43	28.100	−11	7	18.67
8	6			28.091			18.79
				28.096			18.73
							−.01

No. 275.

1899							
July 25	6	19	44	59.114	−40	7	49.30
27	5			59.216			49.14
				59.165			49.22
							+.67

No. 281.

1899	Mag.	h	m	s	°	′	″
July 18	7½	19	44	17.443	−10	58	42.85
20	7¼			17.526			42.90
				17.484			42.87
							−.02

No. 286.

1899							
July 21		19	45	13.355	−11	1	10.45
24				.354			11.02
Aug. 9				.389			11.53
10				.390			11.14
				13.372			11.03
							−.01
Obs. Lat. 303					37	20	25.65
Red. Lat.							25.57
							−.23

No. 288.

1899							
Aug. 7	8	19	45	43.152	−19	28	5.57
8	7½			43.101			5.33
				43.126			5.45
							+.07

No. 291.

1899							
Aug. 25	6	19	46	19.845	−19	18	5.41
Sep. 4	6			19.837			6.36
				19.841			5.88
							+.06

No. 297.

1899							
Aug. 7	5	19	48	17.742	−42	8	2.98
8	5			17.707			2.32
				17.724			2.65
							+1.21

No. 302.

1899							
Aug. 9	6	19	48	36.791	−33	18	36.55
10	6			36.846			35.96
				36.818			36.25
							+.33

No. 309.

1899							
Aug. 14	6	19	48	39.504	−8	50	10.92
15	6½			39.431			10.83
				39.467			10.87
							−.03

No. 311.

1899							
Aug. 14	5½	19	49	39.281	−26	34	2.33
15	6			39.197			2.79
				39.239			2.56
							+.17

No. 313.

1899							
Aug. 25	6¼	19	49	9.553	−8	29	25.00
Sep. 4	6¼			9.551			25.46
				9.552			25.23
							−.03

No. 314.

1899	Mag.	h	m	s	°	′	″
Sep. 5	7	19	49	9.989	−8	30	0.18
7	6¾			9.961		29	59.64
				9.975		29	59.91
							−.03

No. 318.

1899							
Aug. 9	6	19	49	34.313	+0	0	34.75
10	6			34.389			35.11
				34.351			34.93
							−.09

No. 322.

1899							
July 21	5	19	50	45.026	−27	26	15.16
24	5			45.051			14.96
				45.038			15.06
							+.18

No. 328.

1899							
Aug. 7	6½	19	53	39.204	−45	23	22.09
8	6			39.213			20.75
				39.208			21.42
							+2.68

No. 329.

1899							
July 18	5	19	52	13.340	−15	45	34.08
20	5			13.364			33.68
				13.352			33.88
							+.03

No. 330.

1899							
July 31	5	19	53	9.925	−35	32	58.09
Aug. 1	5½			9.846			58.43
				9.886			58.26
							+.41

No. 331.

1899							
July 25	5	19	52	48.027	−26	28	8.38
27	5			47.992			8.55
				48.010			8.46
							+.17

No. 333.

1899							
July 21	5½	19	53	17.987	−34	58	11.86
24	5½			17.970			10.36
				17.978			11.11
							+.39

No. 339.

1899							
Aug. 9	8½	19	54	27.121	−21	7	57.66
10	8½			27.189			57.05
				27.155			57.35
							+.09

No. 346.

1899							
July 25	8	19	54	48.398	−22	54	47.99
27	7½			48.422			48.43
				48.410			48.21
							+.11

No. 351.

1899	Mag.	h	m	s	°	′	″
July 18	6	19	55	23.722	−23	0	53.80
20	6			23.791			53.61
				23.756			53.70
							+.11

No. 353.

1899							
Aug. 14	5	19	56	50.971	−38	13	13.58
15	6			50.996			13.20
				50.983			13.39
							+.54

No. 355.

1899							
Aug. 7	4	19	56	26.957	−27	59	26.56
8	4			26.889			26.63
				26.923			26.59
							+.19

No. 359.

1899							
Aug. 9	7	19	57	20.317	−38	8	55.12
10	7			20.392			54.77
				20.354			54.95
							+.53

No. 360.

1899							
July 31		19	56	19.146	−13	55	0.90
Aug. 1				.120			0.85
Sep. 5				.090			0.69
7				.118			1.00
				19.118			0.86
							+.01
Obs. Lat. 303					37	20	26.06
Red. Lat.							26.05
							−.25

No. 365.

1899							
July 21		19	56	27.870	−0	28	40.73
24	8, 8½			27.888			41.10
Dup. mean				27.879			40.91
							−.08

No. 366.

1899							
Aug. 14	5½	19	57	55.493	−32	20	22.63
15	5½			55.374			23.57
				55.433			23.10
							+.30

No. 367.

1899							
Aug. 22	7¾	19	57	23.776	−18	31	27.42
24	7½			23.779			27.83
				23.777			27.62
							+.05

No. 369.

1899							
July 25		19	57	45.267	−22	52	44.90
27				45.211			45.22
				45.239			45.06
							+.11
Obs. Lat. 303					37	20	26.83
Red. Lat.							26.74
							−.35

No. 372.

1899	Mag.	h	m	s	°	′	″
Aug. 25	7½	19	57	50.316	−15	41	44.81
Sep. 4	7			50.307			45.42
				50.311			45.11
							+.03

No. 374.

1899							
Aug. 7	6	19	59	5.635	−33	17	9.92
8	6			5.682			9.61
				5.658			9.76
							+.33

No. 376.

1899							
July 18	8	19	58	15.997	−0	11	36.00
20	7¾			16.034			36.17
				16.016			36.08
							−.09

No. 377.

1899							
July 21	7	19	59	1.462	−21	35	54.94
24	7			1.533			54.54
				1.497			54.74
							+.09

No. 381.

1899							
Aug. 18	7½	19	59	36.993	−16	39	34.19
21	7			37.030			33.96
				37.011			34.08
							+.04

No. 382.

1899							
Aug. 9	6½	19	59	30.755	−11	53	6.04
10	6½			30.805			6.25
				30.780			6.15
							−.01

No. 383.

1899							
July 31	6	19	59	10.942	−0	59	28.10
Aug. 1	5½			10.963			27.38
				10.952			27.74
							−.08

No. 384.

1899							
July 25	6½	19	59	49.399	−12	57	1.83
27	6			49.430			1.72
				49.414			1.77
							.00

No. 387.

1898							
Sep. 23	8½	19	59	57.070	−15	42	46.96
28	8¼			57.047			46.53
				57.058			46.74
							+.03

No. 388.

1898							
Sep. 13		20	0	18.538	−19	46	51.92
14	8			18.488			51.35
				18.513			51.63
							+.07

No. 389.

1899	Mag.	h	m	s	°	′	″
Aug. 22	8½	19	59	56.011	−6	52	18.06
24	8½			55.936			17.77
				55.973			17.91
							−.05

No. 390.

1899							
Sep. 6	8¼	20	0	33.648	−21	57	57.18
9	8			33.682			56.45
				33.665			56.81
							+.10

Anon.

1898							
Sep. 19	8½	20	0	39.397	−5	43	6.25
							−.05

No. 396.

1898							
Sep. 15	8	20	1	5.008	−13	13	9.14
16	8¼			5.014			9.22
				5.011			9.18
							.00

No. 398.

1898							
Sep. 29	7½	20	1	10.620	−12	43	56.91
Oct. 4	7½			10.616			56.73
				10.618			56.82
							.00

No. 399.

1899							
Aug. 7	8	20	1	26.915	−9	12	14.46
8	7½			26.874			14.93
				26.894			14.69
							−.03

No. 402.

1899							
Aug. 14	7	20	2	22.999	−19	5	45.20
15	7			22.861			46.07
				22.930			45.63
							+.06

No. 403.

1899							
Aug. 9	8¼	20	1	55.909	−1	9	47.50
10	7¾			55.898			47.14
				55.903			47.32
							−.08

No. 404.

1898							
Sep. 23	6	20	2	43.940	−15	19	26.62
28	6½			43.870			26.62
				43.905			26.62
							+.02

No. 405.

1898							
Aug. 7		20	4	15.403	−43	57	38.06
8	6½			15.389			37.67
				15.396			37.86
							+1.90

No. 406.

1898							
Sep. 19	6	20	2	56.683	−10	21	28.02
20	7			56.699			27.99
				56.691			28.01
							−.02

No. 408.

1899	Mag.	h	m	s	°	′	″
Aug. 18	6½	20	2	48.781	−0	58	8.79
21	6			48.897			7.90
				48.839			8.34
							−.08

No. 410.

1898							
Sep. 13		20	3	35.829	−20	53	22.67
14	7½			35.774			22.35
				35.801			22.51
							+.08

No. 411.

1898							
Sep. 15	6	20	4	29.888	−36	21	27.06
16	6			29.921			27.60
				29.904			27.33
							+.44

No. 416.

1899							
Aug. 22	6½	20	5	27.421	−43	4	40.63
24	6¾			27.384			40.37
				27.402			40.50
							+1.53

No. 417.

1899							
Aug. 9	7	20	4	34.291	−19	40	38.20
10	7			34.302			38.53
				34.296			38.36
							+.07

No. 423.

1899							
Aug. 14	8	20	5	6.868	−6	27	39.14
15	7½			6.751			39.25
				6.810			39.20
							−.05

No. 4.

1899							
Aug. 18	6½	20	5	41.495	−9	8	28.39
21	6¼			41.449			28.33
				41.472			28.36
							−.03

No. 6.

1899							
Sep. 5	7	20	5	42.915	−6	23	12.09
7	6¾			42.961			12.10
				42.938			12.09
							−.05

No. 7.

1899							
Aug. 22	6	20	6	22.071	−12	41	32.38
24	7			22.069			32.70
				22.070			32.54
							.00

No. 8.

1899							
Aug. 14	8	20	6	12.820	−6	26	58.39
15	8			12.813			58.98
				12.816			58.68
							−.05

No. 10.

1898	Mag.	h	m	s	°	′	″
Sep. 6		20	6	2.458	−1	7	26.25
7				2.540			26.66
				2.499			26.45
							−.08
Obs. Lat. B. J.					37	20	25.75
Red. Lat.							25.94
							−.16

No. 11.

1898							
Sep. 23	8	20	6	2.986	−0	26	30.55
28	8¼			2.935			30.54
				2.960			30.54
							−.08

No. 12.

1898							
Sep. 19	7	20	6	4.477	−0	25	40.46
20	7¾			4.502			41.42
				4.489			40.94
							−.08

No. 16.

1899							
Sep. 5	6½	20	6	48.236	−12	54	47.83
7				48.153			48.58
				48.194			48.21
							.00

No. 18.

1899							
Aug. 18	7½	20	6	38.522	−0	7	15.69
21	7½			38.508			15.33
				38.515			15.51
							−.09

No. 20.

1898							
Sep. 15	8¼	20	7	8.959	−11	8	41.79
16	8			8.964			41.49
				8.961			41.64
							−.01

No. 29.

1898							
Sep. 19	6	20	8	55.671	−27	20	14.24
20	6			55.716			15.06
				55.693			14.65
							+.18

No. 31.

1899							
Aug. 14	5½	20	8	0.908	−1	18	42.96
15	6			0.883			43.62
				0.896			43.29
							−.08

No. 33.

1899							
Aug. 18	7½	20	8	52.499	−19	30	47.68
21	7			52.473			47.00
				52.486			47.34
							+.07

No. 39.

1898							
Sep. 13		20	9	13.963	−11	56	45.21
14	8½			13.935			44.45
				13.949			44.83
							−.01

No. 40.

1899	Mag.	h	m	s	°	′	″
Aug. 7	7	20	9	15.812	−11	11	48.13
8	7			15.852			47.61
				15.832			47.87
							−.01

No. 41.

1899							
Sep. 23	8	20	9	6.235	−0	9	51.96
28	8			6.218			51.88
				6.226			51.92
							−.08

No. 45.

1898							
Sep. 6	6¾	20	10	15.433	−16	36	21.62
7	7½			15.509			21.54
				15.471			21.58
							+.03

No. 49.

1899							
Aug. 9	6½	20	10	47.295	−12	38	46.83
10	6			47.274			46.71
				47.284			46.77
							.00

No. 50.

1898							
Sep. 15	8	20	10	24.016	−2	52	33.90
16	8½			24.087			33.78
				24.051			33.84
							−.07

No. 53.

1898							
Sep. 29		20	12	1.868	−22	7	30.15
Oct. 4				1.812			30.64
				1.840			30.39
							+.10
Obs. Lat. 303					37	20	26.77
Red. Lat.							27.02
							−.34

No. 53.

1899							
Aug. 7		20	12	5.403	−22	7	19.40
8				5.372			19.13
				5.387			19.27
							+.10
Obs. Lat. 303					37	20	26.28
Red. Lat.							26.33
							−.34

No. 54.

1898							
Sep. 23		20	11	59.672	−12	49	23.80
28				59.631			24.05
				59.651			23.92
							.00
Obs. Lat. B. J.					37	20	25.87
Red. Lat.							26.12
							−.24

No. 58.

1898	Mag.	h	m	s	°	′	″
Sep. 13		20	12	23.730	− 12	51	39.92
14				23.740			40.13
				23.735			40.02
							.00
Obs. Lat. B. J.					37	20	26.32
Red. Lat.							26.53
							−.24

1899							
	No. 58.						
Aug. 18		20	12	27.049	− 12	51	29.91
21				27.027			29.16
				27.038			29.54
							.00
Obs. Lat. B. J.					37	20	26.63
Red. Lat.							26.63
							−.24

1898							
	No. 66.						
Sep. 15	7½	20	13	19.505	− 14	36	33.05
16	7½			19.497			32.75
				19.501			32.90
							+.02

1899							
	No. 67.						
Aug. 9	5	20	13	34.070	− 19	26	2.06
10	5			33.982			1.96
				34.026			2.01
							+.06

1898							
	No. 73.						
Sep. 6	7¾	20	14	10.014	− 14	35	38.64
7	8			10.057			38.76
				10.035			38.70
							+.02

1899							
	No. 75.						
Aug. 14	6	20	15	36.242	− 42	22	7.28
15	6½			36.173			6.07
				36.207			6.67
							+1.28

1899							
	No. 76.						
Aug. 7	6½	20	14	37.796	− 19	57	50.05
8	7			37.786			49.17
				37.791			49.61
							+.07

1898							
	No. 79.						
Sep. 23	6½	20	15	2.691	− 15	6	23.38
28	6			2.709			22.86
				2.700			23.12
							+.02

1898							
	No. 80.						
Sep. 13		20	15	10.107	− 18	38	44.23
14	7½			10.032			43.56
				10.069			43.90
							+.06

1898							
	No. 81.						
Sep. 29	5	20	15	0.349	− 13	4	48.02
Oct. 4	5			0.325			48.58
				0.337			48.30
							.00

1898							
	No. 83.						
Sep. 19		20	15	16.847	− 15	6	12.14
20				16.802			12.58
				16.824			12.36
							+.02
Obs. Lat. B. J.					37	20	25.78
Red. Lat.							26.01
							−.26

1899							
	No. 83.						
Sep. 5		20	15	20.274	− 15	6	1.13
7				20.240			1.29
				20.257			1.21
							+.02
Obs. Lat. B. J.					37	20	25.72
Red. Lat.							25.79
							−.26

1899							
	No. 84.						
Aug. 18	7	20	15	3.519	− 6	40	38.93
21	6½			3.464			38.56
				3.491			38.74
							−.05

1899							
	No. 87.						
Aug. 14	6	20	17	1.353	− 42	44	51.56
15	6½			1.263			51.16
				1.308			51.36
							+1.41

1898							
	No. 88.						
Sep. 15	7¾	20	16	7.592	− 22	16	50.07
16				7.635			50.84
				7.613			50.45
							+.10

1899							
	No. 90.						
Aug. 22	7½	20	15	45.625	− 6	40	22.14
24	7½			45.600			21.60
				45.612			21.87
							−.05

1899							
	No. 94.						
Aug. 25	7½	20	16	39.755	− 16	8	57.22
Sep. 4	8			39.694			57.22
				39.724			57.22
							+.03

1899							
	No. 95.						
Aug. 9	8	20	16	30.695	− 6	53	13.82
10	7½			30.721			13.70
				30.708			13.76
							−.05

1899							
	No. 96.						
Aug. 18	8	20	17	0.626	− 12	42	15.01
21	8			0.629			14.98
				0.627			14.99
							.00

1899							
	No. 97.						
Aug. 22	8	20	17	20.484	− 18	39	52.71
24	7½			20.399			52.98
				20.441			52.85
							+.06

1899							
	No. 98.						
Aug. 7	8	20	17	7.010	− 9	8	50.76
8	8			6.897			50.72
				6.953			50.74
							−.03

1898							
	No. 100.						
Sep. 29	8	20	17	26.620	− 16	6	59.03
Oct. 4	8			26.535			58.76
				26.577			58.89
							+.03

1898							
	No. 102.						
Sep. 19	7	20	17	43.920	− 14	35	0.30
20	7½			43.949			0.20
				43.934			0.25
							+.02

1898							
	No. 103.						
Sep. 23	8	20	17	34.433	− 6	0	7.56
28	7½			34.473			6.84
				34.453			7.20
							−.05

1898							
	No. 105.						
Sep. 6	7½	20	18	17.372	− 23	48	13.64
7	7½			17.427			14.41
				17.399			14.03
							+.12

1898							
	No. 107.						
Sep. 13		20	18	32.220	− 14	26	31.42
14	7			32.245			31.22
				32.232			31.32
							+.01

1898							
	No. 109.						
Sep. 15	7	20	19	11.169	− 19	45	50.83
16	7			11.172			49.40
				11.170			50.12
							+.07

1898							
	No. 111.						
Sep. 29	6	20	20	16.588	− 37	43	59.93
Oct. 4	6			.477			59.40
5				.575			60.15
				16.547			59.83
							+.51

No. 114.

1899	Mag.	h	m	s	°	′	″
Aug. 7	7	20	19	34.476	− 12	1	54.47
8	7¼			34.455			54.04
				34.466			54.25
							−.01

No. 115.

1899							
Aug. 9	7½	20	19	27.948	− 1	52	5.12
10	7½			27.886			5.04
				27.917			5.08
							−.08

No. 121.

1899							
Aug. 14	7¾	20	19	53.788	− 3	45	6.54
15	8			53.677			6.20
				53.732			6.37
							−.07

No. 123.

1898							
Sep. 23	7½	20	20	29.598	− 19	29	5.28
28	8			29.574			4.76
				29.586			5.02
							+.07

No. 125.

1899							
Aug. 18	7½	20	20	39.178	− 14	11	33.10
21	7½			39.145			32.77
				39.161			32.93
							+.01

No. 127.

1899							
Aug. 22	8¼	20	21	13.269	− 19	52	35.39
24	8			13.238			35.92
				13.253			35.65
							+.07

No. 128.

1899							
Aug. 25	7½	20	20	43.778	− 4	11	38.15
Sep. 4	7¾			43.767			38.93
				43.772			38.54
							−.06

No. 129.

1898							
Sep. 19	8	20	20	41.829	− 3	46	38.28
20	8½			41.787			38.24
				41.808			38.26
							−.07

No. 131.

1898							
Sep. 13		20	21	28.998	− 18	32	46.57
14				28.959			45.96
				28.978			46.27
							+.05

No. 133.

1898							
Sep. 6	6	20	22	14.101	− 35	55	55.93
7	6			14.120			56.83
				14.110			56.38
							+.42

No. 138.

1899	Mag.	h	m	s	°	′	″
Aug. 7	8	20	22	12.821	− 3	43	39.32
8	8			12.767			39.19
				12.794			39.25
							−.07

No. 139.

1899							
Aug. 14	7¼	20	22	12.524	− 2	26	59.23
15	7½			12.491			59.37
				12.507			59.30
							−.07

No. 140.

1899							
Aug. 9	6	20	22	13.209	− 2	26	0.62
10	6¼			13.183		25	59.87
				13.196		26	0.25
							−.07

No. 142.

1898							
Sep. 15		20	23	2.567	− 18	9	3.29
16				2.574			4.20
				2.570			3.74
							+.05
Obs. Lat. B. J.						37 20	26.72
Red. Lat.							26.94
							−.29

No. 142.

1899							
Sep. 6		10	23	6.002	− 18	8	51.45
11				6.007			51.68
15				5.992			51.60
18				6.012			51.06
				6.003			51.45
							+.05
Obs. Lat. B. J.						37 20	25.88
Red. Lat.							25.97
							−.29

No. 144.

1898							
Sep. 29	6½	20	23	11.147	− 18	12	37.17
Oct. 4	7			11.147			37.44
				11.147			37.31
							+.05

No. 145.

1899							
Aug. 18	6¾	20	23	14.023	− 17	46	8.41
21	6½			14.027			8.44
				14.025			8.42
							+.05

No. 146.

1898							
Sep. 19	6	20	23	32.282	− 22	43	46.93
20	6			32.257			47.23
				32.269			47.08
							+.11

No. 147.

1899							
Aug. 22	7	20	23	7.565	− 3	41	29.21
24	6½			7.520			29.06
				7.542			29.13
							−.07

No. 148.

1898	Mag.	h	m	s	°	′	″
Sep. 23	7½	20	23	14.740	− 4	45	58.20
28	7¾			14.741			58.04
				14.740			58.12
							−.06

No. 153.

1899							
Sep. 5	6¾	20	24	5.175	− 18	55	14.27
7	7			5.157			13.93
				5.166			14.10
							+.06

No. 154.

1899							
Aug. 25	6¼	20	24	6.525	− 18	55	3.31
Sep. 4	6¼			6.518			3.11
				6.521			3.21
							+.06

No. 157.

1898							
Sep. 13		20	24	19.127	− 3	13	29.19
14	6			19.067			29.20
				19.097			29.20
							−.07

No. 158.

1899							
Aug. 7	7½	20	24	42.357	− 4	46	20.61
8	7½			42.292			20.36
				42.324			20.48
							−.06

No. 159.

1899							
Aug. 9	7½	20	25	13.326	− 5	43	39.87
10	7			13.349			39.38
				13.337			39.62
							−.05

No. 160.

1899							
Aug. 14	8	20	25	17.485	− 6	9	51.14
15	8			17.489			51.36
				17.487			51.25
							−.05

No. 161.

1899							
Aug. 18	6½	20	25	25.720	− 10	22	22.59
21	6¾			25.737			23.05
				25.728			22.82
							−.02

No. 163.

1899							
Sep. 5	6	20	26	58.714	− 44	51	31.64
7	6			58.702			31.76
				58.708			31.70
							+2.36

No. 165.

1898							
Sep. 15	7½	20	26	14.516	− 25	12	54.06
16	7½			14.676			53.97
				14.596			54.02
							+.15

No. 166.

1898	Mag.	h	m	s	°	′	″
Sep. 23	7½	20	26	15.129	− 22	29	56.98
28	8			15.151			56.78
				15.140			58.88
							+.10

No. 167.

1898							
Sep. 29	8¼	20	26	17.348	− 22	30	22.79
Oct. 4	8¼			17.296			22.89
				17.322			22.84
							+.10

No. 170.

1898							
Sep. 19	6	20	26	47.998	− 25	17	16.68
20	6½			47.943			17.60
				47.970			17.14
							+.15

No. 172.

1898							
Sep. 6	7	20	26	44.998	− 16	57	15.04
7	7			45.007			15.93
				45.002			15.48
							+.04

No. 174.

1899							
Aug. 8		20	26	52.241	− 10	11	52.61
18				.142			52.71
21				.189			53.35
				52.191			52.89
							−.02
Obs. Lat. 303					37	20	26.33
Red. Lat.							26.31
							−.22

No. 175.

1899							
Aug. 22	8	20	26	38.364	− 3	46	56.11
24	8			38.235			55.95
				38.300			56.03
							−.07

No. 176.

1899							
Aug. 25	7	20	26	44.410	− 5	35	2.81
Sep. 4	6			44.449			3.47
				44.430			3.14
							−.05

No. 180.

1899							
Aug. 9	7	20	27	37.020	− 22	34	25.77
10	7			37.038			25.64
				37.029			25.71
							+.10

No. 181.

1898							
Sep. 13		20	28	17.007	− 38	26	20.08
14	7			18.840			19.02
				17.923			19.55
							+.55

No. 187.

1899	Mag.	h	m	s	°	′	″
Aug. 14	6	20	28	34.450	− 14	4	5.03
15	6½			34.327			5.96
				34.388			5.50
							+.01

No. 193.

1898							
Sep. 15	8¼	20	29	16.286	− 9	25	32.94
16	8½			16.275			32.72
				16.280			32.83
							−.03

No. 194.

1898							
Sep. 19	6½	20	29	45.914	− 16	52	33.05
20	6½			45.918			33.73
				45.916			33.39
							+.04

No. 195.

1898							
Sep. 23	8	20	29	42.677	− 9	21	13.89
28	7½			42.736			13.96
				42.706			13.92
							−.03

No. 200.

1898							
Sep. 6	6¾	20	30	32.323	− 20	56	15.21
7	6½			32.346			15.61
				32.334			15.41
							+.08

No. 202.

1898							
Sep. 29	7¾	20	30	9.089	− 2	24	10.90
Oct. 4	7¾			9.087			10.76
				9.088			10.83
							−.07

No. 209.

1899							
Aug. 18	6½	20	31	41.462	− 15	29	50.75
21	6½			41.480			50.36
				41.471			50.55
							+.02

No. 212.

1898							
Sep. 13		20	31	24.910	− 2	54	11.21
14				24.928			11.79
				24.919			11.50
							−.07
Obs. Lat. 303					37	20	25.96
Red. Lat.							26.17
							−.17

No. 212.

1899							
Aug. 14		20	31	28.066	− 2	53	59.08
15				28.081			59.62
				28.073			59.35
							−.07
Obs. Lat. 303					37	20	25.61
Red. Lat.							25.59
							−.17

No. 213.

1898	Mag.	h	m	s	°	′	″
Sep. 15	8	20	32	2.165	− 17	28	38.07
16	7½			2.139			38.57
				2.152			38.32
							+.04

No. 215.

1898							
Sep. 19	7½	20	32	30.502	− 21	20	56.74
20	7½			30.297			57.12
				30.400			56.93
							+.09

No. 216.

1899							
Aug. 22	7½	20	31	57.674	− 1	39	46.50
24	7			57.651			46.60
				57.662			46.55
							−.08

No. 218.

1899							
Sep. 5	7½	20	32	59.504	− 17	25	5.06
7	7½			59.475			5.31
				59.490			5.18
							+.04

No. 219.

1899							
Aug. 25	6½	20	34	9.112	− 42	45	15.88
Sep. 4	6½			9.155			16.67
				9.133			16.27
							+1.41

No. 221.

1899							
Aug. 25	6½	20	32	49.739	− 4	44	3.73
Sep. 4	6½			49.699			3.80
				49.719			3.76
							−.06

No. 223.

1899							
Aug. 18	7	20	34	39.019	− 42	29	28.06
21	6½			38.976			30.62
				38.997			29.34
							+1.33

No. 224.

1898							
Sep. 29	5	20	33	4.193	− 1	27	41.30
Oct. 4	5			4.154			41.67
				4.174			41.48
							−.08

No. 225.

1899							
Aug. 18	5½	20	33	37.508	− 15	18	32.73
21	5¾			37.465			32.98
				37.486			32.85
							+.02

No. 229.

1899							
Aug. 14	8	20	33	54.005	− 15	19	49.12
15	8			53.931			49.50
				53.968			49.31
							+.02

No. 233.

1898	Mag.	h	m	s	°	′	″
Sep. 6		20	34	14.572	−18	29	52.15
7				14.625			51.99
				14.598			52.07
							+.05
Obs. Lat. B. J.					37	20	25.47
Red. Lat.							25.66
							−.29

No. 233.

1899							
Sep. 6		20	34	18.080	−18	29	40.03
11				18.023			40.06
				18.051			40.04
							+.05
Obs. Lat. B. J.					37	20	25.90
Red. Lat.							25.98
							−.29

No. 234.

1899							
Aug. 22	6¾	20	33	58.013	−2	46	5.46
24	6¾			57.989			5.13
				58.001			5.29
							−.07

No. 237.

1899							
Sep. 5	5½	20	34	14.271	+0	7	53.19
7	6			14.292			53.11
				14.281			53.15
							−.09

No. 240.

1898							
Sep. 13		20	34	48.649	−16	29	13.39
14	6			48.578			13.10
				48.613			13.24
							+.03

No. 246.

1898							
Sep. 15	7	20	34	53.751	−3	0	48.09
16	6½			53.682			47.61
				53.716			47.85
							−.07

No. 250.

1898							
Sep. 19	7	20	35	32.346	−17	44	24.72
20	7			32.347			24.94
				32.346			24.83
							+.05

No. 259.

1898							
Sep. 23	8	20	36	11.239	−11	18	29.40
28	8			11.281			29.27
				11.260			29.33
							−.01

No. 260.

1898							
Sep. 29	8¼	20	36	32.942	−2	23	3.27
Oct. 4	8½			32.852			3.38
				32.897			3.33
							−.07

No. 262.

1899	Mag.	h	m	s	°	′	″
Aug. 9	7½	20	37	9.529	−11	19	51.61
10	7			9.526			50.99
				9.527			51.30
							−.01

No. 266.

1898							
Sep. 13		20	37	46.971	−26	11	33.36
14	8½			46.871			32.92
				46.921			33 14
							+.16

No. 267.

1898							
Sep. 6	7½	20	38	11.760	−36	11	44.13
7	7			11.760			44.85
				11.760			44.49
							+.44

No. 274.

1898							
Sep. 15	5	20	39	41.306	−39	34	8.70
16	6			41.344			9.90
				41.325			9.30
							+.62

No. 276.

1898							
Sep. 19	6½	20	39	48.899	−36	29	23.22
20	6½			48.878			22.77
				48.888			22.99
							+.45

No. 282.

1898							
Sep. 29	4	20	40	3.419	−25	38	15.74
Oct. 4	4			3.381			15.77
				3.400			15.75
							+.15

No. 284.

1899							
Aug. 9	6	20	40	18.721	−21	52	52.36
10	6			18.695			52.33
				18.708			52.35
							+.10

No. 286.

1898							
Sep. 23	7½	20	39	42.727	−0	4	30.34
28	7			42.823			30.75
				42.775			30.54
							−.09

No. 289.

1899							
Aug. 18	6	20	41	38.449	−44	21	25.44
21	6			38.421			26.19
				38.435			25.82
							+2.09

No. 290.

1899							
Aug. 14	7½	20	40	31.425	−8	49	24.13
15	7¾			31.375			24.67
				31.400			24.40
							−.03

No. 296.

1898	Mag.	h	m	s	°	′	″
Sep. 6	7½	20	42	19.722	−23	13	14.74
7	8			19.690			14.90
				19.706			14.82
							+.11

No. 297.

1898							
Sep. 13	8	20	41	51.340	−5	27	23.29
14	8½			51.290			24.26
				51.315			23.78
							−.05

No. 298.

1898							
Sep. 19	7	20	42	24.586	−23	6	39.88
20	7			24.613			40.00
				24.599			39.94
							+.11

No. 299.

1898							
Sep. 15		20	42	9.205	−9	52	8.09
16				9.271			8.62
				9.238			8.35
							−.02
Obs. Lat. B. J.					37	20	25.24
Red. Lat.							25.46
							−.22

No. 299.

1899							
Aug. 9		20	42	12.554	−9	51	56.15
10				.561			56.25
22				.541			55.54
24				.467			56.57
25				.479			56.27
Sep. 4				.531			55.97
5				.556			56.43
7				.548			55.70
19				.531			55.78
26				.534			55.99
				12.530			56.06
							−.02
Obs. Lat. B. J.					37	20	25.64
Red. Lat.							25.68
							−.22

No. 301.

1898							
Sep. 23	4	20	42	21.296	−5	24	3.59
28	4			21.250			3.79
				21.273			3.69
							−.05

No. 305.

1898							
Sep. 29	6	20	43	14.259	−26	9	28.17
Oct. 4	6			14.246			28.03
				14.252			28.10
							+.16

No. 307.

1899							
Aug. 18	5	20	43	39.688	−34	9	13.17
21	5			39.663			14.07
				39.676			13.62
							+.36

No. 310.

1899	Mag.	h	m	s	°	′	″
Aug. 22	6½	20	43	36.807	−18	24	30.11
24	6			36.764			30.99
				36.786			30.55
							+.05

No. 311.

1899							
Aug. 14	7	20	43	30.645	−12	59	1.07
15	7½			30.599			1.23
				30.622			1.15
							.00

No. 312.

1899							
Aug. 25	7½	20	44	2.047	−27	44	29.48
Sep. 4	7½			2.079			29.99
				2.063			29.73
							+.19

No. 320.

1898							
Sep. 23	6	20	45	38.694	−33	33	33.28
28	6			38.654			33.20
				38.674			33.24
							+.34

No. 322.

1898							
Sep. 15	7	20	45	27.584	−27	37	31.24
16	7			27.645			30.13
				27.614			30.68
							+.19

No. 325.

1898							
Sep. 13		20	45	4.519	−12	55	22.40
14	6			4.413			22.65
				4.466			22.52
							.00

No. 328.

1898							
Sep. 19	4	20	45	44 080	−27	18	1.90
20	4			44.077			2.20
				44.078			2.05
							+.18

No. 334.

1899							
Sep. 6	5½	20	47	5.980	−40	11	17.47
11	5½			6.021			17.56
				6.000			17.51
							+.69

No. 336.

1898							
Sep. 29	6½	20	46	1.215	−6	0	28.84
Oct. 4	6			1.211			28.18
				1.213			28.51
							−.05

No. 337.

1898							
Sep. 6	6½	20	46	25.930	−11	49	16.90
7	6			26.010			16.53
				25.970			16.72
							−.01

No. 339.

1899	Mag.	h	m	s	°	′	″
Aug. 9	6	20	47	5.825	−24	9	42.86
10	6¼			5.858			41.85
				5.841			42.35
							+.13

No. 340.

1899							
Aug. 14	8¼	20	46	29.501	−5	10	28.08
15	8¼			29.485			28.58
				29.493			28.33
							−.06

No. 341.

1899							
Sep. 12	7	20	46	56.612	−13	34	57.16
14	7			56.582			57.52
				56.597			57.34
							+.01

No. 342.

1899							
Aug. 18	5½	20	46	48.216	−5	53	9.47
21	6			48.154			9.46
				48.185			9.46
							−.05

No. 343.

1899							
Sep. 15	8½	20	47	9.778	−16	32	41.46
18	8¼			9.790			41.03
				9.784			41.24
							+.03

No. 344.

1899							
Aug. 22	8	20	46	59.588	−5	4	55.04
24	7½			59.606			55.85
				59.597			55 45
							−.06

No. 345.

1899							
Sep. 19	4	20	47	12.370	−9	21	43.91
26	4½			12.371			44.26
				12.370			44.08
							−.03

No. 346.

1899							
Sep. 5	7½	20	47	5.154	−3	35	55.78
7	7½			5.157			56.09
				5.156			55.93
							−.07

No. 347.

1899							
Aug. 25	8	20	47	4.609	−0	29	53.78
Sep. 4	8			4.603			53.93
				4.606			53.85
							−.08

No. 348.

1899							
Aug. 9	7¼	20	47	55.799	−26	41	56.15
10	7¼			55.797			55.41
				55.798			55.78
							+.17

No. 351.

1899	Mag.	h	m	s	°	′	″
Aug. 14	6	20	47	34.159	−11	57	19.78
15	7			34.120			20.04
				34.140			19.91
							−.01

No. 353.

1898							
Sep. 13	8	20	48	22.051	−25	57	40.49
14	8			21.997			40.83
				22.024			40.66
							+.16

No. 360.

1898							
Sep. 23	6	20	48	32.194	−7	16	29.47
28	6			32.225			29.07
				32.210			29.27
							−.04

No. 361.

1898							
Sep. 29	8½	20	49	18.025	−26	30	0.81
Oct. 4	8½			17.938			1.33
				17.981			1.07
							+.17

No. 362.

1898							
Sep. 19		20	49	2.025	−18	18	34.81
20				2.022			34.88
				2.023			34.85
							+.05
Obs. Lat. 303						37	20 26.04
Red. Lat.							26.27
							−.29

No. 362.

1899							
Sep. 12		20	49	5.433	−18	18	20.96
14				5.434			21.36
				5.433			21.16
							+.05
Obs. Lat. 303						37	20 25.48
Red. Lat.							25.57
							−.29

No. 363.

1899							
Sep. 5	7¾	20	49	38.097	−31	56	15.16
7	7½			38.141			15.55
				38.119			15.35
							+.29

No. 364.

1899							
Aug. 22	6¾	20	48	45.796	−4	55	29.62
24	7			45.806			29.70
				45.801			29.66
							−.06

No. 366.

1899							
Aug. 14	7½	20	49	42.971	−31	53	26.48
15	8			42.982			26.18
				42.976			26.33
							+.29

No. 367.

1899	Mag.	h	m	s	°	′	″
Aug. 25	7½	20	49	18.375	−15	40	0.01
Sep. 4	8			18.374		39	59.91
				18.374		39	59.96
							+.03

No. 369.

1899							
Sep. 6	7½	20	49	40.250	−7	33	28.11
11	7½			40.276			27.99
				40.263			28.05
							−.04

No. 370.

1899							
Aug. 22	6	20	50	47.300	−26	40	53.61
24	6			47.311			53.48
				47.306			53.55
							+.17

No. 375.

1899							
Aug. 25	8	20	51	7.113	−16	14	17.87
Sep. 4	8			7.131			18.22
				7.122			18.04
							+.03

No. 377.

1898							
Sep. 13	8¾	20	51	29.088	−16	33	52.38
14	8¾			29.067			52.77
				29.077			52.57
							+.03

No. 380.

1898							
Sep. 23	5	20	51	23.221	−10	5	18.55
28	5			23.239			18.01
				23.230			18.28
							−.02

No. 384.

1898							
Sep. 15	8½	20	52	14.561	−32	5	51.69
16	8¾			14.576			52.39
				14.568			52.04
							+.29

No. 385.

1899							
Sep. 5	8½	20	51	40.514	−6	51	30.09
7	8¼			40.491			30.09
				40.502			30.09
							−.05

No. 386.

1899							
Sep. 29	6	20	51	58.117	−16	25	26.80
Oct. 4	6			58.030			26.61
				58.073			26.71
							+.03

No. 390.

1898							
Sep. 19	8	20	52	9.748	−3	37	43.78
20	8			9.706			43.74
				9.727			43.76
							−.07

No. 392.

1899	Mag.	h	m	s	°	′	″
Aug. 25	7	20	53	55.883	−34	37	36.27
Sep. 4	7			55.892			36.06
				55.887			36.16
							+.37

No. 394.

1899							
Aug. 22	7¾	20	53	47.097	−17	16	16.03
24	7½			47.082			16.57
				47.090			16.30
							+.04

No. 395.

1899							
Sep. 6	6	20	53	51.856	−19	25	36.53
11	6			51.895			36.57
				51.876			36.55
							+.06

No. 396.

1899							
Aug. 14	6¾	20	53	27.944	−4	13	57.27
15	7			27.843			57.53
				27.893			57.40
							−.06

No. 397.

1899							
Aug. 18	7½	20	53	33.115	−3	42	29.83
21	7¼			33.026			29.12
				33.070			29.48
							−.07

No. 398.

1899							
Sep. 5	8	20	54	18.077	−27	44	3.44
7	7¾			18.064			4.29
				18.070			3.86
							+.19

No. 402.

1898							
Sep. 13		20	54	18.543	−13	26	53.34
14	6½			18.451			53.96
				18.497			53.65
							.00

No. 403.

1898							
Sep. 19	5	20	55	2.184	−32	39	22.75
20	5			2.202			22.41
				2.193			22.58
							+.31

No. 405.

1898							
Sep. 15	7½	20	55	24.579	−36	58	24.46
16	8			24.611			24.27
				24.595			24.36
							+.47

No. 408.

1898							
Sep. 6	7¾	20	54	47.379	−11	24	21.43
7	7½			47.379			21.50
				47.379			21.46
							−.01

No. 409.

1899							
Aug. 14	6	20	55	10.835	−17	55	28.42
15	6½			10.717			29.49
				10.776			28.96
							+.05

No. 411.

1899							
Aug. 25	6½	20	55	45.675	−27	16	34.23
Sep. 4	6			45.699			33.91
				45.687			34.07
							+.18

No. 413.

1899							
Aug. 18	6½	20	55	12.432	−5	52	15.87
21	7			12.425			15.33
				12.428			15.60
							−.05

No. 414.

1898							
Sep. 23		20	55	11.607	−5	7	28.01
28				.560			26.99
29				.579			27.36
Oct. 4				.635			27.20
				11.595			27.39
							−.06
Obs. Lat. 303						37	20 26.24
Red. Lat.							26.48
							−.18

No. 414.

1899							
Sep. 12		20	55	14.713	−5	7	13.85
14				.688			14.09
15				.711			13.78
18				.702			13.89
				14.703			13.90
							−.06
Obs. Lat. 303						37	20 25.83
Red. Lat.							25.92
							−.18

No. 415.

1899							
Sep. 6	6	20	55	34.356	−13	55	29.66
11	6			34.409			29.71
				34.382			29.68
							+.01

No. 416.

1899							
Aug. 22	7½	20	55	20.721	−5	45	6.81
24	7¾			20.694			6.61
				20.707			6.71
							−.05

No. 418.

1899							
Sep. 5	6	20	56	30.835	−39	1	33.90
7	5½			30.752			33.80
				30.793			33.85
							+.58

No. 423.

1899	Mag.	h	m	s	°	′	″
Aug. 22	7	20	56	29.286	−12	5	30.25
24	7			29.305			30.31
				29.296			30.28
							−.01

No. 425.

1899	Mag.	h	m	s	°	′	″
Aug. 14	7½	20	57	22.214	−25	28	22.37
15	7¾			22.181			21.56
				22.197			21.96
							+.15

No. 426.

1899	Mag.	h	m	s	°	′	″
Sep. 6	8	20	57	1.527	−11	34	41.32
11	8			1.590			41.16
				1.558			41.24
							−.01

No. 428.

1898	Mag.	h	m	s	°	′	″
Sep. 13	7	20	57	35.849	−17	52	15.99
14	7½			35.882			16.15
				35.865			16.07
							+.05

No. 430.

1899	Mag.	h	m	s	°	′	″
Aug. 25	6½	20	58	55.885	−45	21	3.21
Sep. 4	6½			55.832			3.52
				55.858			3.36
							+2.65

No. 432.

1898	Mag.	h	m	s	°	′	″
Sep. 19	7	20	57	44.142	−1	19	37.00
20	7			44.092			36.88
				44.117			36.94
							−.08

No. 433.

1898	Mag.	h	m	s	°	′	″
Sep. 15	8	20	58	16.352	−18	30	54.07
16	7½			16.384			53.42
				16.368			53.75
							+.05

No. 435.

1898	Mag.	h	m	s	°	′	″
Sep. 29	8	20	58	56.959	−32	45	1.39
Oct. 4	7¾			56.916			1.69
				56.937			1.54
							+.31

No. 436.

1899	Mag.	h	m	s	°	′	″
Aug. 18	5	20	58	39.464	−20	15	15.83
21	5			39.479			14.86
				39.471			15.34
							+.08

No. 438.

1898	Mag.	h	m	s	°	′	″
Sep. 23	8¾	20	58	16.050	−6	38	40.78
28	8½			16.155			40.24
				16.102			40.51
							−.05

No. 439.

1899	Mag.	h	m	s	°	′	″
Aug. 14	5	20	59	51.309	−41	47	18.13
15	5½			51.281			21.04
				51.295			19.58
							+1.11

No. 441.

1898	Mag.	h	m	s	°	′	″
Sep. 6		20	58	40.983	−6	13	36.70
7				40.944			36.85
				40.963			36.77
							−.05

No. 442.

1899	Mag.	h	m	s	°	′	″
Aug. 25	8	21	0	2.994	−41	47	15.86
Sep. 4	8½			2.929			14.64
				2.961			15.25
							+1.11

No. 443.

1899	Mag.	h	m	s	°	′	″
Aug. 22	7¼	20	59	11.240	−17	33	51.84
24	7¼			11.207			51.93
				11.223			51.88
							+.04

No. 444.

1899	Mag.	h	m	s	°	′	″
Sep. 5	6	20	59	55.321	−30	31	34.75
7	6			55.311			34.51
				55.316			34.63
							+.25

No. 445.

1899	Mag.	h	m	s	°	′	″
Sep. 6	5	21	0	14.235	−32	44	44.04
11	5			14.232			44.18
				14.233			44.11
							+.31

No. 451.

1899	Mag.	h	m	s	°	′	″
Sep. 12	5	21	0	16.256	−17	38	3.23
14	5			16.185			2.84
				16.220			3.03
							+.05

No. 454.

1898	Mag.	h	m	s	°	′	″
Sep. 13	6	21	0	53.057	−20	35	17.15
14	7			53.046			17.83
				53.051			17.49
							+.08

No. 456.

1898	Mag.	h	m	s	°	′	″
Sep. 19	5	21	1	9.795	−25	24	48.91
20	5			9.707			48.84
				9.751			48.87
							+.15

No. 459.

1899	Mag.	h	m	s	°	′	″
Aug. 18	7	21	1	35.875	−31	27	56.30
21	7			35.916			56.00
				35.896			56.15
							+.28

No. 460.

1898	Mag.	h	m	s	°	′	″
Sep. 15	7½	21	1	28.221	−16	22	53.88
16	7			28.220			53.92
				28.220			53.90
							+.03

No. 461.

1899	Mag.	h	m	s	°	′	″
Aug. 22	7½	21	1	35.342	−16	8	54.61
24	7½			35.211			54.75
				35.276			54.68
							+.03

No. 462.

1899	Mag.	h	m	s	°	′	″
Aug. 14	6½	21	1	46.509	−19	29	32.41
15	7			46.473			32.60
				46.491			32.50
							+.07

No. 466.

1898	Mag.	h	m	s	°	′	″
Sep. 29	7½	21	2	17.891	−16	2	2.35
Oct. 4	7½			17.829			2.28
				17.860			2.31
							+.03

No. 468.

1899	Mag.	h	m	s	°	′	″
Aug. 25	7	21	2	56.906	−28	52	55.49
Sep. 4	7			56.867			55.91
				56.886			55.70
							+.21

No. 469.

1899	Mag.	h	m	s	°	′	″
Sep. 6	5½	21	2	46.619	−21	35	57.54
11	5			46.629			57.65
				46.624			57.60
							+.09

No. 470.

1899	Mag.	h	m	s	°	′	″
Sep. 5	7	21	2	22.574	−5	58	42.62
7	7¼			22.514			42.65
				22.544			42.63
							−.05

No. 474.

1899	Mag.	h	m	s	°	′	″
Aug. 18	6½	21	3	30.196	−20	36	6.93
21	6½			30.137			6.60
				30.166			6.76
							+.08

No. 477.

1898	Mag.	h	m	s	°	′	″
Sep. 13		21	3	58.502	−39	8	5.55
14	7¼			58.467			6.27
				58.484			5.91
							+.24

No. 478.

1899	Mag.	h	m	s	°	′	″
Aug. 14	6	21	3	46.606	−20	57	43.37
15	6½			46.582			43.58
				46.594			43.47
							+.08

No. 481.

1898	Mag.	h	m	s	°	′	″
Sep. 29	7	21	3	43.166	−17	1	44.50
Oct. 4	6½			43.104			45.03
				43.135			44.76
							+.04

No. 483.

1898	Mag.	h	m	s	°	′	″
Sep. 15	8¼	21	4	24.614	−28	54	19.18
16	7¾			24.613			19.65
				24.613			19.42
							+.21

No. 485.

1898							
Sep. 6		21	4	2.307	−11	47	5.06
7				2.340			4.54
				2.323			4.80
							−.01
Obs. Lat. B. J.					37	20	25.64
Red. Lat.							25.83
							−.23

No. 485.

1899							
Sep. 12		21	4	5.586	−11	46	50.72
14				5.582			50.54
				5.584			50.63
							−.01
Obs. Lat. B. J.					37	20	25.77
Red. Lat.							25.86
							−.23

No. 487.

1898							
Sep. 19	7½	21	4	28.245	−16	6	55.66
20	8			28.151			55.51
				28.198			55.58
							+.03

No. 493.

1899							
Aug. 22	7½	21	5	20.127	−9	45	50.01
24	6½			20.122			50.31
				20.124			50.16
							−.02

No. 2.

1899							
Aug. 14	6	21	6	35.411	−39	50	11.28
15	5½			35.429			11.86
				35.420			11.57
							+.64

No. 4.

1899							
Aug. 18	7½	21	6	18.124	−28	19	4.48
21	8			18.173			3.88
				18.148			4.18
							+.20

No. 7.

1898							
Sep. 23	7	21	6	3.214	−14	53	21.48
28	6½			3.185			20.94
				3.200			21.21
							+.02

No. 8.

1899							
Aug. 25	7½	21	6	18.090	−20	44	42.58
Sep. 4	7½			18.161			43.23
				18.126			42.91
							+.08

No. 11.

1899	Mag.	h	m	s	°	′	″
Sep. 5	7½	21	6	31.236	−14	58	17.71
7	7½			31.176			18.11
				31.206			17.91
							+.02

No. 12.

1898							
Sep. 13		21	7	14.446	−28	2	7.69
14	5			14.492			7.61
				14.469			7.65
							+.20

No. 14.

1898							
Sep. 19	7	21	7	53.831	−30	4	58.38
20	7½			53.743			58.54
				53.787			58.46
							+.24

No. 16.

1898							
Sep. 15	8½	21	7	21.948	−7	34	31.73
16	8			21.988			30.53
				21.968			31.13
							−.04

No. 17.

1899							
Aug. 14	6½	21	8	45.317	−40	55	29.36
15	6			45.298			29.52
				45.307			29.44
							+.86

No. 18.

1898							
Sep. 6		21	8	10.149	−22	37	57.45
7	6½			10.164			57.59
				10.156			57.52
							+.11

No. 20.

1899							
Aug. 25	7¼	21	8	13.325	−20	30	16.66
Sep. 4	7½			13.352			17.12
				13.338			16.89
							+.08

No. 24.

1899							
Aug. 22	7	21	8	9.835	−6	19	39.79
24	7¼			9.871			40.10
				9.853			39.95
							−.05

No. 27.

1898							
Sep. 23	7	21	9	12.513	−22	14	15.05
28	7			12.485			15.75
				12.499			15.40
							+.10

No. 28.

1899							
Aug. 18	7¾	21	9	12.898	−21	12	15.30
21	8			12.934			14.75
				12.916			15.02
							+.09

No. 33.

1899	Mag.	h	m	s	°	′	″
Sep. 6	5½	21	9	53.024	−21	4	15.80
11	5½			53.046			15.58
				53.035			15.69
							+.08

No. 34.

1899							
Sep. 5	7	21	9	32.523	−7	30	18.94
7	7			32.490			19.56
				32.506			19.25
							−.04

No. 37.

1898							
Sep. 15	6	21	10	6.145	−15	35	43.04
16	5			6.112			42.82
				6.128			42.93
							+.02

No. 39.

1898							
Sep. 13	7	21	10	20.372	−9	32	40.58
14	7½			20.368			40.55
				20.370			40.57
							−.03

No. 40.

1899							
Aug. 22	7½	21	10	29.330	−9	48	40.83
24	7½			29.288			41.32
				29.309			41.07
							−.02

No. 41.

1899							
Aug. 25	7	21	10	56.279	−20	35	37.69
Sep. 4	7			56.326			37.53
				56.302			37.61
							+.08

No. 42.

1899							
Aug. 14	7	21	11	21.580	−31	10	3.69
15	6			21.570			4.02
				21.575			3.86
							+.27

No. 44.

1898							
Sep. 29	6	21	10	49.188	−9	38	22.02
Oct. 4	6½			49.234			22.17
				49.211			22.09
							−.03

No 45.

1898							
Sep. 19	7	21	11	1.125	−9	34	57.44
20	7¼			1.112			57.79
				1.118			57.61
							−.03

No. 46.

1898							
Sep. 23	5	21	11	45.297	−32	35	55.56
28	5			45.219			55.84
				45.258			55.70
							+.31

No. 52.

1898	Mag.	h	m	s	°	′	″
Sep. 6	5	21	12	14.028	−18	24	44.50
7	5			14.046			44.61
				14.037			44.55
							+.05

No. 55.

1899							
Aug. 18	6½	21	12	56.234	−29	11	18.31
21	6½			56.230			18.64
				56.232			18.48
							+.22

No. 56.

1899							
Aug. 22	6½	21	12	36.628	−17	53	8.49
24	7			36.591			9.05
				36.610			8.77
							+.05

No. 57.

1899							
Aug. 25	6¾	21	12	42.513	−20	45	30.61
Sep. 4	6½			42.508			30.51
				42.510			30.56
							+.08

No. 59.

1898							
Sep. 15	8¼	21	12	56.479	−12	41	34.63
16	7½			56.500			34.77
				56.490			34.70
							.00

No. 60.

1899							
Sep. 5	6	21	12	53.176	−4	56	36.78
7	6			53.149			36.88
				53.162			36.83
							−.06

No. 64.

1899							
Aug. 14	5	21	14	18.283	−41	14	13.04
15	5½			18.142			12.26
				18.212			12.65
							+.95

No. 65.

1898							
Sep. 29	7	21	13	51.604	−27	38	21.71
Oct. 4	7			51.566			21.24
				51.585			21.47
							+.19

No. 66.

1898							
Sep. 13		21	13	35.009	−16	36	28.41
14	7			34.964			28.87
				34.986			28.64
							+.03

No. 70.

1898							
Sep. 19	8¼	21	14	18.239	−5	54	59.95
20	8¼			18.257	55		0.83
				18.248	55		0.39
							−.05

No. 75.

1898	Mag.	h	m	s	°	′	″
Sep. 23	7½	21	15	15.453	−21	15	5.70
28	7¼			15.430			5.29
				15.441			5.50
							+.09

No. 78.

1899							
Sep. 6	7	21	15	49.372	−29	35	41.08
11	6½			49.429			40.44
				49.400			40.76
							+.23

No. 79.

1899							
Sep. 5	8½	21	15	25.466	−1	52	58.37
7	8¼			25.391			59.15
				25.428			58.76
							−.08

No. 81.

1898							
Sep. 15		21	15	43.461	−4	59	34.59
16				43.498			34.57
				43.479			34.58
							−.06
Obs. Lat. 303					37	20	25.97
Red. Lat.							26.09
							−.18

No. 81.

1899							
Aug. 18		21	15	46.613	−4	59	18.97
21				.628			19.29
22				.571			19.63
24				.596			19.80
25				.616			19.66
Sep. 4				.546			19.89
				46.595			19.54
							−.06
Obs. Lat. 303					37	20	25.79
Red. Lat.							25.80
							−.18

No. 82.

1899							
Sep. 12	7½	21	16	1.348	−11	53	8.12
14	7½			1.279			8.23
				1.313			8.17
							−.01

No. 84.

1898							
Sep. 6	4	21	16	34.073	−17	16	7.67
7	4			34.087			7.54
				34.080			7.61
							+.04

No. 87.

1898							
Sep. 13	5	21	17	9.664	−23	6	16.21
14	5			9.714			16.17
				9.689			16.19
							+.11

No. 89.

1899							
Aug. 14	6	21	17	58.611	−41	26	24.88
15	6			58.597			23.11
				58.604			24.00
							+1.00

No. 92.

1898	Mag.	h	m	s	°	′	″
Sep. 19	6	21	17	28.142	−9	45	13.80
20	6			28.137			14.36
				28.139			14.08
							−.02

No. 93.

1899							
Aug. 18	6	21	18	3.927	−25	38	4.01
21	6½			3.954			3.63
				3.940			3.82
							+.15

No. 95.

1898							
Sep. 29	7¾	21	17	29.979	−3	58	51.65
Oct. 4	7½			29.939			51.92
				29.959			51.78
							−.06

No. 96.

1898							
Sep. 23	8	21	18	19.168	−25	59	52.89
28	7½			19.122			52.81
				19.145			52.85
							+.16

No. 97.

1899							
Aug. 22	7	21	18	21.038	−23	10	47.68
24	6½			21.022			47.16
				21.030			47.42
							+.11

No. 98.

1899							
Sep. 5	7	21	18	30.525	−24	51	18.26
7	7			30.567			18.18
				30.546			18.22
							+.14

No. 99.

1899							
Aug. 25	6	21	18	25.931	−21	16	52.93
Sep. 4	6			25.953			52.56
				25.942			52.75
							+.09

No. 101.

1899							
Sep. 6	7½	21	18	34.772	−23	43	25.85
11	7			34.762			26.02
				34.767			25.93
							+.12

No. 104.

1898							
Sep. 15	6	21	18	37.079	−13	18	55.82
16	6			37.114			56.69
				37.096			56.25
							.00

No. 106.

1899							
Sep. 12	8	21	19	12.132	−12	12	47.18
14	7¾			12.097			47.10
				12.114			47.14
							−.01

No. 107.

1899	Mag.	h	m	s	°	′	″
Aug. 25	6	21	20	32.947	−42	59	7.96
Sep. 4	6¼			32.977			9.18
				32.962			8.57
							+1.49

No. 108.

1899							
Aug. 14	7	21	19	56.869	−25	40	24.67
15	7			56.834			24.66
				56.851			24.66
							+.15

No. 109.

1899							
Aug. 18	6	21	19	35.796	−3	49	52.39
21	6			35.839			51.94
				35.817			52.16
							−.07

No. 110.

1899							
Sep. 15	6	21	19	47.420	−10	10	42.90
18	6			47.393			43.65
				47.406			43.28
							−.02

No. 111.

1898							
Sep. 13	7½	21	20	14.446	−24	55	26.96
14	7½			14.439			26.79
				14.442			26.88
							+.14

No. 112.

1899							
Aug. 22	8	21	19	53.186	−2	25	23.23
24	7½			53.141			23.55
				53.163			23.39
							−.07

No. 113.

1898							
Sep. 29	5½	21	19	57.742	−3	59	38.47
Oct. 4	5½			57.799			38.22
				57.770			38.35
							−.06

No. 115.

1898							
Sep. 6	7½	21	20	34.825	−21	26	22.46
7	7½			34.919			21.80
				34.872			22.13
							+.09

No. 118.

1898							
Sep. 19		21	20	50.650	−22	51	11.49
20				50.657			11.73
				50.653			11.61
							+.11
Obs. Lat. B. J.					37	20	25.93
Red. Lat.							26.16
							−.35

No. 119.

1899							
Sep. 5	7	21	20	55.860	−12	31	34.97
7	7			55.836			35.45
				55.848			35.21
							.00

No. 121.

1899	Mag.	h	m	s	°	′	″
Aug. 18	7	21	21	37.355	−28	9	54.13
21	7			37.401			53.65
				37.378			53.89
							+.20

No. 122.

1898							
Sep. 23	6	21	21	27.905	−21	38	15.22
28	5½			27.836			14.86
				27.870			15.04
							+.09

No. 123.

1899							
Sep. 6	7½	21	21	47.439	−20	38	55.55
11	7¼			47.428			55.25
				47.433			55.40
							+.08

No. 125.

1899							
Aug. 22	7	21	21	51.896	−14	1	32.22
24	7½			51.869			32.46
				51.882			32.34
							+.01

No. 126.

1899							
Sep. 12	7	21	22	10.118	−12	6	13.11
14	7			10.087			12.69
				10.102			12.90
							−.01

No. 127.

1899							
Sep. 19	7¾	21	22	27.429	−22	9	28.43
26	7½			27.495			28.79
				27.462			28.61
							+.10

No. 128.

1899							
Aug. 25	7¼	21	22	29.257	−14	8	7.44
Sep. 4	7¾			29.237			7.18
				29.247			7.31
							+.01

No. 129.

1899							
Sep. 6	6	21	23	1.784	−31	40	42.06
11	6½			1.751			42.58
				1.767			42.32
							+.28

No. 130.

1899							
Aug. 14	8	21	22	36.376	−12	22	2.87
15	8			36.283			2.75
				36.330			2.81
							.00

No. 131.

1899							
Sep. 5	8½	21	22	39.351	−12	31	40.78
7	8½			39.327			40.80
				39.339			40.79
							.00

No. 132.

1898	Mag.	h	m	s	°	′	″
Sep. 29	5	21	22	54.495	−22	15	5.14
Oct. 4	5			54.447			5.15
				54.471			5.15
							+.10

No. 134.

1899							
Aug. 18	6½	21	22	45.764	−12	0	22.92
21	6¾			45.750			23.45
				45.757			23.18
							−.01

No. 135.

1899							
Sep. 15	7¾	21	22	39.781	−2	51	59.57
18	7¾			39.770			59.93
				39.776			59.75
							−.07

No. 138.

1899							
Aug. 22	7½	21	23	4.263	−3	3	0.42
24	7½			4.211			0.91
				4.237			0.66
							−.07

No. 139.

1899							
Sep. 12	7	21	23	6.519	−3	19	28.82
14	7			6.526			28.52
				6.522			28.67
							−.07

No. 143.

1898							
Sep. 13	8½	21	23	56.777	−12	31	27.13
14	8½			56.783			28.50
				56.780			27.81
							.00

No. 144.

1899							
Aug. 25	7	21	24	8.364	−14	27	60.02
Sep. 4	7			8.316			59.89
				8.340			59.95
							+.01

No. 145.

1898							
Sep. 19	7	21	24	16.128	−19	35	34.08
20	7			16.093			34.32
				16.110			34.20
							+.07

No. 147.

1899							
Sep. 5	8	21	24	34.775	−24	52	10.82
7	7¼			34.743			11.21
				34.759			11.01
							+.14

No. 148.

1898							
Sep. 6	7½	21	24	32.465	−25	38	23.13
7	7			32.599			22.86
				32.532			23.00
							+.15

No. 152.

1899	Mag.	h	m	s	°	′	″
Sep. 12	5½	21	25	42.314	−41	37	28.27
14	5½			42.342			28.24
				42.328			28.26
							+1.05

No. 154.

1899							
Sep. 6	6½	21	25	8.499	−14	44	0.15
11	6½			8.479			0.45
				8.489			0.30
							+.02

No. 155.

1899							
Aug. 18	6	21	26	8.146	−34	23	22.82
21	6			8.107			23.85
				8.126			23.33
							+.37

No. 158.

1898							
Sep. 15	7½	21	25	41.977	−19	41	8.21
16	7			41.979			9.00
				41.978			8.61
							+.07

No. 161.

1899							
Aug. 22	6	21	26	44.218	−25	2	11.00
24	6			44.175			11.69
				44.196			11.35
							+.14

No. 162.

1898							
Sep. 29		21	26	11.357	−6	1	11.86
Oct. 4				11.389			11.63
				11.373			11.75
							−.05
Obs. Lat. B. J.					37	20	26.32
Red. Lat.							26.57
							−.19

No. 162.

1899							
Sep. 15		21	26	14.568	−6	0	55.78
18				.547			55.96
19				.518			55.88
26				.500			55.57
				14.533			55.80
							−.05
Obs. Lat. B. J.					37	20	25.59
Red. Lat.							25.70
							−.19

No. 164.

1899							
Sep. 5	7½	21	27	35.262	−28	20	6.89
7	7½			35.262			7.96
				35.262			7.42
							+.20

No. 165.

1899							
Aug. 25	8	21	27	30.328	−21	7	22.56
Sep. 4	8			30.314			22.71
				30.321			22.63
							+.09

No. 167.

1898	Mag.	h	m	s	°	′	″
Sep. 19	7½	21	27	7.149	−6	45	30.65
20	8			7.137			30.77
				7.143			30.71
							−.05

No. 169.

1899							
Sep. 12	7¾	21	28	14.691	−28	20	50.27
14	8			14.611			51.15
				14.651			50.71
							+.20

No. 171.

1899							
Sep. 6	7¼	21	28	5.439	−16	38	43.32
11	7			5.481			43.35
				5.460			43.33
							+.04

No. 172.

1899							
Aug. 18	7	21	28	3.827	−13	53	50.53
21	7¼			3.792			49.84
				3.810			50.18
							+.01

No. 175.

1899							
Aug. 14	8	21	28	19.565	−6	49	14.79
15	7½			19.522			15.31
				19.543			15.05
							−.05

No. 176.

1898							
Sep. 23	8	21	28	24.570	−5	52	10.03
28	7½			24.562			9.55
				24.566			9.79
							−.05

No. 177.

1898							
Sep. 6	7½	21	28	42.743	−13	56	12.20
7	6½			42.798			11.60
				42.770			11.90
							+.01

No. 179.

1898							
Sep. 29	8	21	29	7.455	−20	53	53.66
Oct. 4	7¾			7.448			53.77
				7.452			53.71
							+.08

No. 180.

1899							
Aug. 22	6	21	29	10.762	−20	32	4.12
24	6			10.709			4.68
				10.736			4.40
							+.08

No. 181.

1899							
Aug. 25	7	21	29	14.202	−20	42	0.97
Sep. 4	6½			14.186			1.41
				14.194			1.19
							+.08

No. 182.

1898	Mag.	h	m	s	°	′	″
Sep. 15	8½	21	28	41.842	−0	13	42.20
16	8			41.807			41.95
				41.824			42.07
							−.09

No. 184.

1899							
Sep. 6	6¾	21	29	29.381	−23	54	13.81
11	6¾			29.430			13.47
				29.406			13.64
							+.12

No. 186.

1899							
Sep. 5	7¼	21	29	19.372	−9	32	7.73
7	7¼			19.344			7.79
				19.358			7.76
							−.03

No. 187.

1899							
Sep. 15	7½	21	29	40.050	−19	41	39.16
18	7½			40.043			38.42
				40.046			38.79
							+.07

No. 188.

1899							
Aug. 18	6	21	30	19.622	−26	37	19.67
21	6			19.659			19.49
				19.640			19.58
							+.17

No. 189.

1899							
Aug. 22	6½	21	30	44.977	−33	30	0.04
24	6½			44.985		29	59.77
				44.981		29	59.91
							+.34

No. 190.

1898							
Sep. 19	6	21	29	58.086	−4	26	15.02
20	6			58.089			15.47
				58.087			15.25
							−.06

No. 193.

1899							
Sep. 12	7½	21	30	44.732	−18	50	36.49
14	7½			44.788			36.66
				44.760			36.57
							+.06

No. 197.

1898							
Sep. 13		21	31	22.207	−19	55	23.23
14				22.178			22.89
				22.192			23.06
							+.07
Obs. Lat. 303						37	20 25.96
Red. Lat.							26.18
							−.31

No. 197.

1899	Mag.	h	m	s	°	′	″
Aug. 14		21	31	25.583	−19	55	7.78
15				.528			7.21
Sep. 5				.529			7.23
7				.597			7.06
				25.559			7.32
							+.07
Obs. Lat. 303					37	20	25.91
Red. Lat.							25.94
							−.31

No. 199.

1898							
Sep. 15	7½	21	31	39.815	−18	53	44.40
16	6½			39.850			44.73
				39.832			44.56
							+.06

No. 201.

1898							
Sep. 23	8	21	31	55.519	−19	41	19.56
28	7¾			55.522			20.03
				55.520			19.80
							+.07

No. 204.

1899							
Aug. 18	7	21	32	21.806	−25	53	57.44
21	7			21.751			57.25
				21.778			57.34
							+.16

No. 206.

1898							
Sep. 29	8	21	32	10.997	−16	42	37.05
Oct. 4	8¼			11.001			37.06
				10.999			37.05
							+.04

No. 207.

1898							
Sep. 6	7½	21	32	34.813	−28	21	9.20
7				34.836			9.44
				34.824			9.32
							+.20

No. 209.

1899							
Aug. 25	5	21	32	22.489	−8	18	25.92
Sep. 4	5			22.469			25.79
				22.479			25.85
							−.04

No. 212.

1899							
Sep. 6	7½	21	32	41.798	−15	21	55.11
11	7			41.810			54.17
				41.804			54.64
							+.02

No. 214.

1898							
Sep. 19	8	21	32	55.235	−17	19	17.79
20	8¼			55.262			18.40
				55.248			18.09
							+.04

No. 218.

1899	Mag.	h	m	s	°	′	″
Aug. 14	7½	21	33	44.560	−14	30	50.91
15	8			44.512			51.72
				44.536			51.31
							+.01

No. 223.

1898							
Sep. 15		21	34	26.420	−17	7	23.60
16				.381			22.77
Oct. 5				.389			23.75
				26.397			23.37
							+.04
Obs. Lat. B. J.					37	20	26.32
Red. Lat.							26.54
							−.28

No. 223.

1899							
Aug. 22		21	34	29.746	−17	7	6.66
24				.747			7.23
Sep. 5				.783			7.15
7				.747			6.96
				29.756			7.00
							+.04
Obs. Lat. B. J.					37	20	25.73
Red. Lat.							25.77
							−.28

No. 224.

1898							
Sep. 13		21	34	16.011	−0	30	44.20
14	6			16.001			44.34
				16.006			44.27
							−.08

No. 226.

1898							
Sep. 23	7½	21	34	53.765	−19	21	27.17
28	7			53.786			27.39
				53.776			27.28
							+.06

No. 230.

1898							
Sep. 29	7½	21	35	44.170	−22	23	29.73
Oct. 4	8			44.209			29.95
				44.190			29.84
							+.10

No. 231.

1899							
Aug. 18	7½	21	35	50.970	−22	7	18.39
21	7½			50.981			17.95
				50.976			18.17
							+.10

No. 232.

1899							
Sep. 6	7½	21	35	56.599	−15	18	3.07
11	7½			56.600			2.94
				56.600			3.00
							+.02

No. 233.

1899							
Aug. 25	7	21	36	6.960	−20	15	55.29
Sep. 4	6½			6.935			55.22
				6.947			55.25
							+.07

No. 234.

1899	Mag.	h	m	s	°	′	″
Aug. 22	5	21	36	15.686	−23	43	11.97
24	5½			15.720			12.27
				15.703			12.12
							+.12

No. 235.

1898							
Sep. 19	6	21	36	0.137	−14	30	9.00
20	6			0.105			9.09
				0.121			9.05
							+.01

No. 238.

1899							
Sep. 5	5	21	37	1.118	−19	19	35.89
7	5			1.148			35.71
				1.133			35.80
							+.06

No. 239.

1898							
Sep. 6	7½	21	36	42.726	−0	7	4.28
7	7½			42.749			4.83
				42.737			4.51
							−.09

No. 240.

1899							
Aug. 14	7½	21	37	6.138	−8	55	29.90
15	7¾			6.035			30.21
				6.086			30.06
							−.03

No. 243.

1898							
Sep. 13		21	37	31.225	−20	5	12.30
14	6			31.214			11.47
				31.220			11.89
							+.07

No. 244.

1898							
Sep. 15	6½	21	37	30.553	−14	51	57.16
16	6			30.525			57.07
				30.539			57.12
							+.02

No. 250.

1898							
Sep. 19	5	21	38	52.394	−33	29	28.88
20				52.367			27.90
				52.380			28.39
							+.34

No. 251.

1898							
Sep. 23	6	21	38	26.797	−15	13	0.17
28	6			26.790		12	59.67
				26.793		12	59.92
							+.02

No. 254.

1898							
Sep. 29	7	21	39	3.774	−5	11	54.18
Oct. 4	7			3.732			54.14
				3.753			54.16
							−.06

No. 257.

1899	Mag.	h	m	s	°	′	″
Aug. 18	6½	21	39	31.962	−9	30	2.69
21	6¾			32.055			2.44
				32.008			2.56
							−.03

No. 258.

1899							
Aug. 14	5½	21	39	37.190	−9	32	46.56
15	5			37.169			47.11
				37.180			46.83
							−.03

No. 268.

1898							
Sep. 15	6	21	40	49.799	−9	44	46.93
16	6			49.824			47.09
				49.811			47.01
							−.02

No. 270.

1898							
Sep. 6		21	41	2.671	−11	50	10.59
7				2.613			10.61
				2.642			10.60
							−.01
Obs. Lat. B. J.					37	20	25.34
Red. Lat.							25.53
							−.23

No. 270.

1899							
Aug. 25		21	41	5.940	−11	49	54.55
Sep. 4				.913			54.08
6				.851			54.07
11				.954			53.98
				5.914			54.17
							−.01
Obs. Lat. B. J.					37	20	25.50
Red. Lat.							25.56
							−.23

No. 271.

1898							
Sep. 23	7½	21	41	12.151	−12	9	54.28
28	7			12.209			54.21
				12.180			54.24
							−.01

No. 272.

1899							
Aug. 22	8	21	41	6.561	−4	35	35.30
24	8			6.514			34.69
				6.537			35.00
							−.06

Anon.

1898							
Sep. 19	8	21	41	42.439	−16	31	29.67
							+.03

No. 275.

1899							
Sep. 5	5½	21	41	48.544	−31	21	56.42
7	5			48.673			57.34
				48.608			56.88
							+.27

No. 276.

1898	Mag.	h	m	s	°	′	″
Sep. 13		21	41	24.711	−16	35	25.12
14				24.685			24.56
				24.698			24.84
							+.03
Obs. Lat. B. J.					37	20	25.91
Red. Lat.							26.12
							−.27

No. 276.

1899							
Aug. 14		21	41	28.082	−16	35	7.82
15				27.983			8.52
18				28.001			8.17
21				27.994			8.35
				28.015			8.22
							+.03
Obs. Lat. B. J.					37	20	25.18
Red. Lat.							25.17
							−.27

No. 280.

1898							
Sep. 29	7¾	21	42	16.106	−16	33	1.19
Oct. 4	7¾			16.115			1.51
				16.110			1.35
							+.04

No. 286.

1899							
Aug. 25	8	21	43	24.748	−23	17	18.56
Sep. 4	8½			24.764			17.96
				24.756			18.26
							+.12

No. 287.

1899							
Aug. 22	8½	21	43	12.283	−0	16	1.22
24	8			12.213			0.77
				12.248			1.00
							−.09

No. 290.

1898							
Sep. 15	7	21	43	41.230	−5	52	36.20
16	6½			41.273			35.82
				41.251			36.01
							−.05

No. 291.

1898							
Sep. 23	7	21	44	10.313	−13	11	54.40
28	6½			10.307			54.16
				10.310			54.28
							.00

No. 294.

1898							
Sep. 13		21	44	36.428	−17	19	13.80
14	7			36.402			13.18
				36.415			13.49
							+.04

No. 296.

1898							
Sep. 6	8	21	44	48.132	−16	40	5.94
7	8			48.175			6.45
				48.153			6.19
							+.04

No. 301.

1898	Mag.	h	m	s	°	′	″
Sep. 19	7	21	45	36.381	−23	44	42.74
20	7			36.285			42.95
				36.333			42.85
							+.12

No. 303.

1898							
Sep. 29	6½	21	46	1.946	−19	5	54.25
Oct. 4	6½			1.884			54.82
				1.915			54.53
							+.06

No. 307.

1898							
Sep. 15	7½	21	47	5.094	−17	32	42.38
16	7½			5.124			42.27
				5.109			42.33
							+.04

No. 308.

1899							
Sep. 12	4	21	47	48.848	−37	50	23.69
14	4			48.905			23.67
				48.876			23.68
							+.52

No. 314.

1898							
Sep. 13		21	47	25.809	−4	28	18.19
14	7			25.845			18.18
				25.827			18.19
							−.06

No. 315.

1899							
Sep. 6	5	21	47	47.377	−14	1	37.80
11	5			47.426			38.28
				47.401			38.04
							+.01

No. 317.

1899							
Sep. 15	8	21	48	9.119	−20	29	12.58
18	8			9.158			11.65
				9.138			12.11
							+.08

No. 320.

1898							
Sep. 23		21	48	50.679	−4	45	16.63
28				50.776			16.34
				50.727			16.49
							−.06
Obs. Lat. 303					37	20	26.90
Red. Lat.							27.14
							−.18

No. 323.

1899							
Sep. 6	7	21	49	30.155	−15	44	4.39
11	6½			30.123			4.13
				30.139			4.26
							+.03

No. 324.

1898							
Sep. 13		21	50	14.557	−37	44	14.98
14	6			14.486			12.68
				14.521			13.83
							+.51

No. 326.

1898	Mag.	h	m	s	°	′	″
Sep. 15		21	50	52.892	−38	13	52.40
16	6½			.875			52.01
Oct. 17	7½			.834			53.40
				52.867			52.60
							+.54

No. 327.

1899							
Sep. 12	7	21	50	56.672	−38	8	18.34
14	7¼			56.757			16.79
				56.714			17.56
							+.53

No. 329.

1898							
Oct. 18	8¼	21	51	9.910	−38	14	43.97
1899				+3.632			+16.97
Sep. 15	7¾			13.548	−38	14	26.90
18	7¾			13.582			25.14
				13.565			26.02
							+.53

No. 332.

1899							
Sep. 6	7½	21	51	12.332	−18	22	35.65
11	7			12.319			35.72
				12.326			35.68
							+.05

No. 333.

1898							
Sep. 23	8	21	51	26.018	−19	40	29.23
28	7½			25.999			29.27
				26.008			29.25
							+.07

No. 338.

1898							
Oct. 19	7½	21	52	14.399	−15	36	29.37
20	7			14.361			29.47
				14.380			29.42
							+.02

Anon.

1898							
Sep. 6		21	52	49.502	−3	58	33.49
							−.06

No. 340.

1898							
Sep. 13		21	53	7.954	−38	52	59.71
14	6			8.005			55.76
				7.979			57.73
							+.58

No. 343.

1898							
Sep. 19		21	53	2.508	−21	40	10.38
20				2.506			10.49
				2.507			10.44
							+.09
Obs. Lat. 303					37	20	25.80
Red. Lat.							26.03
							−.33

No. 344.

1898	Mag.	h	m	s	°	′	″
Oct. 12	7	21	52	54.397	−13	9	10.05
13	7½			54.428			10.25
				54.412			10.15
							.00

No. 345.

1898							
Sep. 29	6	21	52	52.466	−5	54	29.79
Oct. 4	6			52.446			29.61
				52.456			29.70
							−.05

No. 348.

1898							
Sep. 15	7½	21	53	56.289	−29	6	23.60
Oct. 5	7½			56.212			24.39
				56.250			24.00
							+.22

No. 350.

1898							
Sep. 23	8	21	54	17.472	−6	45	42.59
28	7½			17.509			42.21
				17.490			42.40
							−.05

No. 351.

1898							
Oct. 17	6	21	54	58.618	−28	56	36.43
18	6			58.702			36.38
				58.660			36.40
							+.21

No. 352.

1898							
Oct. 25	7½	21	54	43.374	−17	52	29.86
26	7½			43.331			29.95
				43.352			29.91
							+.05

No. 353.

1898							
Oct. 27	7	21	54	47.190	+0	26	12.75
Nov. 1	7¼			47.238			12.22
				47.214			12.48
							−.09

No. 354.

1898							
Oct. 19	8	21	55	26.406	−25	29	57.78
20	8			26.403			56.76
				26.404			57.27
							+.15

No. 356.

1899							
Sep. 6	7¾	21	55	46.490	−18	0	5.63
11	7¾			46.488			4.90
				46.489			5.26
							+.05

No. 358.

1898							
Sep. 19	6	21	55	51.817	+0	6	54.48
20	6			51.771			54.64
				51.794			54.56
							−.09

No. 361.

1898	Mag.	h	m	s	°	′	″
Sep. 29		21	56	34.984	−18	23	34.99
Oct. 4				34.971			35.13
				34.978			35.06
							+.05
Obs. Lat. 303					37	20	26.22
Red. Lat.							26.47
							−.29

No. 361.

1899							
Sep. 19		21	56	38.279	−18	23	17.46
26				38.321			17.69
				38.300			17.58
							+.05
Obs. Lat. 303					37	20	25.30
Red. Lat.							25.42
							−.29

No. 364.

1898							
Sep. 13	8	21	56	30.024	−1	37	8.13
14	8			29.953			7.96
				29.988			8.04
							−.08

No. 365 S. pr.

1898							
Sep. 15		21	56	51.488	−17	27	22.48
16	8			51.501			22.61
				51.494			22.54
							+.04

No. 365 N. fol.

1899							
Sep. 15	7½			55.068	−17	27	4.21
18	7½			55.012			3.69
				55.040			3.95
							+.04

No. 366.

1898							
Sep. 23	7½	21	57	23.165	−30	23	46.71
28	7			23.194			47.33
				23.180			47.02
							+.25

No. 367.

1898							
Oct. 12	8	21	57	20.054	−27	32	36.45
13	8			20.040			36.65
				20.047			36.55
							+.19

No. 371.

1898							
Oct. 27	7½	21	57	18.068	−1	24	37.69
Nov. 1	7½			18.045			38.37
				18.056			38.03
							−.08

No. 374.

1898							
Oct. 25	5	21	57	54.559	−7	0	55.44
26	5			54.535			55.28
				54.547			55.36
							−.04

No. 375.

1898	Mag.	h	m	s	°	′	″
Oct. 17	6½	21	58	31.136	−30	24	39.00
18	6½			31.076			37.69
				31.106			38.34
							+.25

No. 376.

1899							
Sep. 6	5	21	58	5.403	−2	38	34.57
11	5			5.400			34.60
				5.401			34.58
							−.07

No. 377.

1898							
Oct. 19	7	21	58	29.175	−22	16	26.46
20	7¾			29.158			25.76
				29.166			26.11
							+.10

No. 378.

1898							
Sep. 19	6	21	58	48.756	−27	18	58.96
20	6½			48.705			58.48
				48.730			58.72
							+.18

No. 379.

1898							
Oct. 27	7	21	58	36.556	−13	30	46.84
Nov. 1	7			36.622			46.93
				36.589			46.89
							+.01

No. 381.

1898							
Oct. 25	5	21	59	58.036	−40	2	8.71
26	5			58.094			9.57
				58.065			9.14
							+.66

No. 382.

1898							
Sep. 15	6	21	59	32.623	−1	23	58.92
16	6			32.667			58.64
				32.645			58.78
							−.08

No. 384.

1898							
Oct. 12	8	22	0	22.550	−29	34	1.67
13	7½			22.544			0.99
				22.547			1.33
							+.23

No. 387.

1898							
Sep. 23		22	0	32.695	−0	48	55.35
28				32.697			55.10
				32.696			55.23
							−.08
Obs. Lat. B. J.					37	20	26.19
Red. Lat.							26.43
							−.16

No. 387.

1899	Mag.	h	m	s	°	′	″
Sep. 12		22	0	35.776	−0	48	38.06
14				35.791			37.89
				35.783			37.98
							−.08
Obs. Lat. B. J.					37	20	25.62
Red. Lat.							25.71
							−.16

No. 389.

1898							
Sep. 6		22	0	55.746	−14	21	52.66
7				55.714			52.17
				55.730			52.41
							+.01
Obs. Lat. B. J.					37	20	25.66
Red. Lat.							25.85
							−.25

No. 389.

1899							
Sep. 6		22	0	59.014	−14	21	34.73
				58.966			34.56
				58.990			34.64
							+.01
Obs. Lat. B. J.					37	20	25.21
Red. Lat.							25.29
							−.25

No. 393.

1898							
Sep. 29	7	22	1	34.187	−22	44	18.30
Oct. 4	7			34.150			18.76
				34.169			18.53
							+.11

No. 397.

1898							
Sep. 13		22	2	26.053	−33	29	10.63
14	5			26.024			10.95
				26.038			10.79
							+.33

No. 398.

1898							
Oct. 19	6½	22	2	46.014	−33	37	31.89
20	6½			46.049			30.60
				46.031			31.24
							+.34

No. 400.

1898							
Oct. 17	7½	22	3	0.221	−26	16	7.31
18	7½			0.208			6.64
				0.214			6.97
							+.16

No. 403.

1898							
Oct. 25	7½	22	2	53.887	−6	52	53.79
26	7½			53.930			53.26
				53.908			53.52
							−.05

No. 407.

1898							
Oct. 12	5	22	3	23.294	−19	1	8.04
13	5			23.365			6.96
				23.329			7.50
							+.06

No. 410.

1898	Mag.	h	m	s	°	′	″
Sep. 19	5	22	4	10.321	−33	2	57.52
20	5½			10.282			57.70
				10.301			57.61
							+.32

No. 412.

1898							
Oct. 27	7½	22	3	26.910	−0	9	38.55
Nov. 1	7¾			26.949			39.40
				26.930			38.97
							−.09

No. 414.

1898							
Sep. 29	7	22	4	3.327	−8	41	13.59
Oct. 4	6½			3.331			13.50
				3.329			13.55
							−.03

No. 418.

1898							
Oct. 19	6	22	5	5.319	−11	19	21.14
20	6			5.350			20.96
				5.334			21.05
							−.01

No. 419.

1898							
Sep. 13		22	5	22.874	−21	44	0.22
14	7			22.837			0.38
				22.855			0.30
							+.09

No. 420.

1898							
Oct. 17	6	22	5	10.286	−12	4	0.13
18	5			10.384			1.00
				10.335			0.56
							−.01

No. 421.

1898							
Sep. 6	6	22	5	2.835	−4	23	38.49
7	6			2.874			39.19
				2.854			38.84
							−.06

No. 2.

1898							
Sep. 15	6½	22	5	14.650	−4	46	5.34
16				.673			5.61
Oct. 5	6			.621			6.24
				14.648			5.73
							−.06

No. 7.

1898							
Sep. 23	8½	22	6	42.025	−14	43	43.32
28	8¼			42.068			43.11
				42.046			43.21
							+.02

No. 9.

1898							
Sep. 29	6	22	6	55.772	−14	41	46.24
Oct. 4	6			55.730			46.72
				55.751			46.48
							+.02

No. 14.

1898	Mag.	h	m	s	°	′	″
Oct. 12	6	22	7	21.066	−6	58	24.16
13	7			21.047			23.50
				21.056			23.83
							−.05

No. 17.

1898							
Oct. 26	6½	22	7	25.130	−5	13	25.15
1899				+3.130			+17.68
Sep. 12	7			28.280			7.11
14	6½			28.303			6.24
				28.291			6.67
							−.06

No. 18.

1898							
Oct. 19	6	22	8	24.741	−41	51	55.38
20	6½			24.776			53.63
				24.758			54.50
							+1.13

No. 19.

1898							
Oct. 27	6	22	8	0.664	−25	41	9.86
Nov. 1	6			0.717			11.04
				0.690			10.45
							+.15

No. 20.

1898							
Oct. 17	7	22	7	59.165	−12	25	49.06
18	7			59.190			48.76
				59.177			48.91
							.00

Anon.

1898							
Oct. 25	7	22	8	35.109	−5	8	58.83
							−.06

No. 21.

1898							
Sep. 13		22	8	32.004	−28	16	21.04
14	6			31.979			20.61
				31.991			20.82
							+.20

No. 22.

1898							
Oct. 12	5	22	8	40.055	−21	34	54.11
13	6			40.040			53.91
				40.047			54.01
							+.09

No. 23.

1898							
Oct. 26	6	22	9	28.253	−41	51	17.07
1899				+3.627			+17.77
Sep. 12	5½	22	9	31.934	−41	50	59.06
14	5½			31.952			57.25
				31.943			58.16
							+1.12

No. 25.

1898							
Sep. 6	8¼	22	9	26.931	−26	28	25.45
7				26.992			25.97
				26.961			25.71
							+.17

No. 31.

1898	Mag.	h	m	s	°	′	″
Oct. 27	5	22	10	18.340	−42	8	4.87
Nov. 1	5			18.254			7.31
				18.297			6.09
							+1.21

No. 35.

1898							
Sep. 23	7½	22	9	52.380	−6	5	29.71
28	7½			52.385			29.35
				52.382			29.53
							−.05

No. 37.

1898							
Sep. 29	6	22	10	53.744	−26	24	21.50
Oct. 4	6			53.728			22.15
				53.736			21.83
							+.16

No. 38.

1898							
Sep. 19	8½	22	10	43.743	−17	42	47.29
20	8½			43.676			46.95
				43.709			47.12
							+.05

No. 41.

1898							
Sep. 15	6	22	11	20.387	−13	20	23.95
16				.357			23.84
Oct. 5	5			.353			24.24
				20.366			24.01
							.00

No. 43.

1898							
Oct. 17	7	22	11	18.303	−2	6	15.66
18	6½			18.308			15.62
				18.306			15.64
							−.08

No. 44.

1898							
Sep. 13		22	11	27.059	−8	17	28.86
14				27.105			28.65
				27.082			28.76
							−.04
Obs. Lat. B. J.					37	20	26.36
Red. Lat.							26.57
							−.20

No. 44.

1899							
Sep. 15		22	11	30.207	−8	17	10.11
18				.263			9.68
19				.300			10.87
26				.261			10.53
				30.258			10.30
							−.04
Obs. Lat. B. J.					37	20	25.42
Red. Lat.							25.53
							−.20

No. 46.

1898							
Oct. 19	6	22	11	29.473	−9	32	53.92
20	6			29.459			53.69
				29.466			53.80
							−.03

No. 48.

1898	Mag.	h	m	s	°	′	″
Oct. 12	5	22	11	46.965	−5	53	47.84
13	6			46.989			47.20
				46.977			47.52
							−.05

No. 56.

1898							
Sep. 6	5	22	13	32.244	−13	48	55.92
7	5			32.363			56.21
				32.303			56.06
							+.01

No. 59.

1898							
Sep. 23	8	22	14	3.598	−9	0	60.02
28	8			3.623			59.16
				3.610			59.59
							−.03

No. 63.

1898							
Sep. 13		22	14	49.864	−8	20	0.10
14	6			49.868			0.01
				49.866			0.06
							−.04

No. 67.

1898							
Sep. 19		22	15	58.735	−22	6	35.06
20				.745			34.57
Oct. 19				.740			34.60
20				.740			34.08
25				.745			34.48
26				.715			34.47
27				.739			34.47
Nov. 1				.722			33.96
				58.735			34.46
							+.10
Obs. Lat. 303					37	20	26.30
Red. Lat.							26.57
							−.34

No. 68.

1898							
Sep. 15	7½	22	16	3.487	−6	45	22.40
Oct. 5	7½			3.522			22.41
				3.504			22.41
							−.05

No. 71.

1898							
Oct. 12	7½	22	16	26.284	−6	41	41.40
13	7¾			26.301			41.07
				26.292			41.23
							−.05

No. 72.

1898							
Sep. 29		22	16	23.251	−1	54	4.48
Oct. 4				.232			4.24
17				.241			4.21
18				.238			4.84
				23.241			4.44
							−.08
Obs. Lat. B. J.					37	20	25.25
Red. Lat.							25.51
							−.16

No. 72.

1899	Mag.	h	m	s	°	′	″
Sep. 12		22	16	26.394	− 1	53	46.80
14				26.405			46.54
				26.400			46.67
							−.08
Obs. Lat. B. J.					37	20	25.44
Red. Lat.							25.53
							−.16

No. 78.

1898							
Sep. 6	6	22	17	49.812	− 25	16	41.58
7	5			49.876			41.21
				49.844			41.39
							+.15

No. 81.

1898							
Sep. 13	6	22	18	11.114	− 7	42	37.13
14	6½			11.139			37.30
				11.126			37.21
							−.04

No. 83.

1898							
Sep. 19	7	22	18	43.928	− 10	42	48.91
20	7¼			43.865			47.79
				43.896			48.35
							−.02

No. 84.

1898							
Oct. 12	6½	22	19	4.083	− 27	22	34.23
13	7			4.044			33.59
				4.063			33.91
							+.18

No. 85.

1898							
Sep. 23	6	22	18	48.080	− 5	21	11.14
28	6			48.164			9.88
				48.122			10.51
							−.06

No. 86.

1898							
Sep. 15		22	18	59.283	− 14	2	46.46
16				.243			47.11
Oct. 5				.272			46.67
19				.278			46.86
20				.300			46.84
25				.246			46.75
26				.239			47.01
27				.255			47.03
Nov. 1				.286			47.13
				59.267			46.87
							+.01
Obs. Lat. 303					37	20	25.55
Red. Lat.							25.81
							−.25

No. 89.

1898							
Sep. 29	7	22	19	20.066	− 1	42	16.06
Oct. 4	7			20.092			16.35
				20.079			16.21
							−.08

No. 91.

1898	Mag.	h	m	s	°	′	″
Oct. 17	6	22	20	32.250	− 24	12	3.08
18	6			32.242			3.04
				32.246			3.06
							+.13

No. 93.

1898							
Sep. 23	7½	22	21	1.787	− 17	15	34.99
28	7			1.877			35.02
				1.832			35.00
							+.04

No. 94.

1898							
Oct. 19	6½	22	21	2.263	− 17	15	39.54
20	6½			2.287			39.29
				2.275			39.42
							+.04

No. 98.

1898							
Sep. 13		22	21	16.650	− 11	44	48.41
14	7½			16.612			48.64
				16.631			48.52
							−.01

No. 102.

1898							
Sep. 6	5	22	22	40.610	− 39	38	52.45
7	6			40.533			53.87
				40.571			53.16
							+.62

No. 104.

1898							
Oct. 25	4	22	23	10.388	− 44	1	0.00
26	4			10.456			4.65
				10.422			2.32
							+1.92

No. 108.

1898							
Oct. 27	4	22	23	39.902	− 44	16	18.61
Nov. 1	5			39.877			20.10
				39.890			19.35
							+2.04

No. 110.

1898							
Sep. 19	7½	22	23	41.501	− 10	15	36.17
20	7½			41.505			36.22
				41.503			36.19
							−.02

No. 111 N. pr.

1898							
Sep. 15		22	23	34.663	− 0	32	29.42
16				.673			29.50
Oct. 5				.617			29.88
1899							
Sep. 18	6½			34.651			29.60
							−.08

No. 111 S. fol.

1899							
Sep. 15	6	22	23	37.910	− 0	32	12.94
18	6			37.917			13.82
				37.913			13.38
							−.08

No. 112.

1898	Mag.	h	m	s	°	′	″
Oct. 12	5	22	24	3.713	− 27	37	44.06
13	5			3.647			44.56
				3.680			44.31
							+.19

No. 114.

1898							
Sep. 29	8½	22	23	55.482	− 10	11	3.01
Oct. 4	8½			55.492			3.14
				55.487			3.07
							−.02

No. 117.

1898							
Oct. 17	6½	22	24	49.363	− 15	6	26.38
18	6½			49.314			26.07
				49.338			26.22
							+.02

No. 118.

1898							
Oct. 19	6½	22	25	13.543	− 26	35	41.07
20	6½			13.554			40.54
				13.548			40.80
							+.17

No. 119.

1898							
Oct. 25	8	22	25	11.448	− 24	41	27.42
26	7¾			11.440			27.63
				11.444			27.52
							+.14

No. 122.

1898							
Oct. 12		22	25	14.960	− 11	11	60.10
13				14.900			59.56
				14.930			59.83
							−.01
Obs. Lat. 303					37	20	26.25
Red. Lat.							26.52
							−.23

No. 123.

1898							
Oct. 17	4	22	25	42.393	− 32	52	9.30
18	4			42.386			9.81
				42.389			9.56
							+.32

No. 124.

1898							
Oct. 27	8	22	25	42.805	− 32	52	39.27
Nov. 1	8			42.799			39.15
				42.802			39.21
							+.32

No. 125.

1898							
Oct. 4	8	22	25	28.768	− 11	8	54.85
1899				+3.178			+18.37
Sep. 19	8			31.986	− 11	8	36.62
26	7½			31.970			36.52
				31.978			36.57
							−.01

No. 126.

1898	Mag.	h	m	s	°	′	″
Sep. 29	8	22	25	41.978	− 11	7	43.82
1899				+3.177			+18.38
Sep. 15	8			45.124	− 11	7	25.27
18	8			45.145			24.92
				45.134			25.09
							−.01

No. 130.

1898	Mag.	h	m	s	°	′	″
Sep. 15	6½	22	26	16.880	− 11	25	41.77
16				.768			41.35
Oct. 5	6½			.824			41.55
				16.824			41.56
							−.01

No. 133.

1898	Mag.	h	m	s	°	′	″
Sep. 19	7½	22	26	43.081	− 14	7	13.25
20	7¾			43.045			12.36
				43.063			12.81
							+.01

No. 138.

1898	Mag.	h	m	s	°	′	″
Oct. 19	7½	22	27	32.534	− 18	1	32.25
20	7			32.495			31.61
				32.514			31.93
							+.05

No. 142.

1898	Mag.	h	m	s	°	′	″
Sep. 29	6½	22	28	44.249	− 10	8	4.30
Oct. 4	6			44.253			4.14
				44.251			4.22
							−.02

No. 143.

1898	Mag.	h	m	s	°	′	″
Sep. 23		22	29	6.892	− 21	13	51.04
28				.872			51.00
Oct. 27				.898			50.91
Nov. 1				.946			50.88
				6.902			50.96
							+.09
Obs. Lat. 303					37	20	26.35
Red. Lat.							26.61
							−.33

No. 143.

1899	Mag.	h	m	s	°	′	″
Sep. 19		22	29	10.210	− 21	13	31.89
26				10.165			32.78
				10.187			32.33
							+.09
Obs. Lat. 303					37	20	25.80
Red. Lat.							25.92
							−.33

No. 144.

1898	Mag.	h	m	s	°	′	″
Sep. 15	6	22	28	47.431	− 2	5	57.67
Oct. 5	6			47.426			57.30
				47.428			57.48
							−.08

No. 145.

1898	Mag.	h	m	s	°	′	″
Sep. 19	6½	22	29	22.732	+0	4	13.74
20	7			22.771			14.42
				22.751			14.08
							−.09

No. 146.

1898	Mag.	h	m	s	°	′	″
Sep. 13		22	29	59.825	− 24	31	6.85
14	6			59.788			7.04
				59.806			6.94
							+.13

No. 147.

1898	Mag.	h	m	s	°	′	″
Oct. 25	6½	22	30	31.836	− 41	6	32.65
26	6			31.911			32.95
				31.873			32.80
							+.91

No. 148.

1898	Mag.	h	m	s	°	′	″
Sep. 29	7	22	30	20.806	− 21	27	42.94
Oct. 4	7			20.786			43.41
				20.796			43.17
							+.09

No. 149.

1898	Mag.	h	m	s	°	′	″
Oct. 12	6	22	30	19.333	− 17	59	12.95
13	6			19.299			11.96
				19.316			12.46
							+.05

No. 151.

1898	Mag.	h	m	s	°	′	″
Oct. 17		22	30	6.864	− 0	38	35.96
18				6.876			35.82
				6.870			35.89
							−.08
Obs. Lat. B. J.					37	20	25.36
Red. Lat.							25.63
							−.16

No. 151.

1899	Mag.	h	m	s	°	′	″
Sep. 15		22	30	10.002	− 0	38	17.15
18				9.957			17.85
				9.980			17.50
							−.08
Obs. Lat. B. J.					37	20	25.93
Red. Lat.							26.03
							−.16

No. 152.

1898	Mag.	h	m	s	°	′	″
Oct. 19	5	22	31	1.694	− 41	7	3.86
20	6			1.725			3.25
				1.709			3.55
							+.91

No. 153.

1898	Mag.	h	m	s	°	′	″
Sep. 6	6	22	30	51.040	− 32	11	29.04
7				51.065			28.05
				51.052			28.54
							+.30

No. 154.

1898	Mag.	h	m	s	°	′	″
Oct. 27	7½	22	30	54.572	− 32	10	11.35
Nov. 1	7½			54.633			12.98
				54.602			12.16
							+.30

No. 155.

1898	Mag.	h	m	s	°	′	″
Oct. 12	8	22	31	13.771	− 21	37	7.60
13	7½			13.669			6.51
				13.720			7.06
							+.09

No. 160.

1898	Mag.	h	m	s	°	′	″
Sep. 15	8	22	31	57.388	− 20	54	22.61
Oct. 5	7½			57.398			22.12
				57.393			22.36
							+.08

No. 162.

1898	Mag.	h	m	s	°	′	″
Sep. 19	8	22	32	28.273	− 27	58	26.18
20	8			28.266			24.93
				28.269			25.55
							+.19

No. 166.

1898	Mag.	h	m	s	°	′	″
Sep. 23	5	22	32	28.423	− 4	45	14.55
28	5			28.368			14.47
				28.396			14.51
							−.06

No. 170.

1898	Mag.	h	m	s	°	′	″
Sep. 13		22	33	53.989	− 10	33	30.79
14	7			53.946			30.81
				53.967			30.80
							−.02

No. 171.

1898	Mag.	h	m	s	°	′	″
Sep. 29	7½	22	33	58.600	− 4	8	14.86
Oct. 4	8			58.572			14.17
				58.586			14.52
							−.06

No. 172.

1898	Mag.	h	m	s	°	′	″
Sep. 6	6½	22	34	40.881	− 31	11	5.34
7				40.917			6.11
				40.899			5.73
							+.27

No. 175.

1898	Mag.	h	m	s	°	′	″
Sep. 15		22	35	[0.809]	− 27	34	32.42
16				0.861			31.99
Oct. 5	4			0.876			32.10
				0.868			32.17
							+.19

No. 176.

1898	Mag.	h	m	s	°	′	″
Oct. 17	7	22	34	45.094	− 9	53	31.54
18	7			45.125			30.83
				45.109			31.18
							−.02

No. 178.

1898	Mag.	h	m	s	°	′	″
Sep. 23	7½	22	34	53.251	−7	3	54.26
28	7			53.246			54.34
				53.248			54.30
							−.04

1898 **No. 182.**

Oct. 19	7	22	35	48.009	−27	47	21.96
20	7¾			47.984			21.66
				47.996			21.81
							+.19

1898 **No. 183.**

Sep. 19	7	22	35	31.270	−4	5	6.13
20	6½			31.227			6.00
				31.248			6.06
							−.06

1898 **No. 187.**

Sep. 29	6	22	36	41.766	−29	53	38.36
Oct. 4	6			41.703			39.06
				41.734			38.71
							+.24

1898 **No. 188.**

Oct. 12	8	22	36	37.792	−10	39	31.32
13	8			37.880			30.91
				37.836			31.11
							−.02

1898 **No. 191.**

Sep. 13		22	36	49.810	−4	0	22.90
14	7½			49.844			23.06
				49.827			22.98
							−.06

1898 **No. 193.**

Oct. 25	5	22	37	35.056	−41	56	46.22
26	5			35.106			48.50
				35.081			47.36
							+1.15

1898 **No. 198.**

Oct. 17	7	22	37	39.220	−10	38	13.29
18	6½			39.264			12.52
				39.242			12.90
							−.02

1898 **No. 200.**

Oct. 19	6½	22	37	42.748	−8	50	43.25
20	7			42.804			43.04
				42.776			43.14
							−.03

1898 **No. 201.**

Sep. 23	8	22	37	53.092	−7	44	57.21
28	8			53.070			56.64
				53.081			56.92
							−.04

No. 202.

1898	Mag.	h	m	s	°	′	″
Sep. 19	6	22	37	54.697	−7	29	49.60
20	6			54.557			48.39
				54.627			48.99
							−.04

1898 **No. 203.**

Oct. 12		22	38	5.958	−19	21	50.54
13				5.908			49.81
				5.933			50.17
							+.06
Obs. Lat. 303						37	20 25.38
Red. Lat.							25.66
							−.30

1898 **No. 204.**

Sep. 15	8½	22	38	6.026	−8	57	8.29
Oct. 5	8½			6.027			8.74
				6.026			8.52
							−.03

1898 **No. 206.**

Sep. 6	8	22	39	15.844	−8	9	9.07
7				15.941			8.80
				15.892			8.94
							−.04

1898 **No. 207.**

Sep. 29	6½	22	39	56.677	−25	46	23.95
Oct. 4	6½			56.693			24.58
				56.685			24.26
							+.15

1898 **No. 208.**

Sep. 13	7½	22	39	46.416	−8	6	4.94
14	8½			46.381			5.21
				46.398			5.08
							−.04

1898 **No. 209.**

Oct. 17	7½	22	39	59.240	−10	10	49.21
18	7½			59.241			48.87
				59.240			49.04
							−.02

1898 **No. 213.**

Sep. 19	8	22	40	58.127	−10	13	59.76
20	8			58.035			58.68
				58.081			59.22
							−.02

1898 **No. 216.**

Sep. 23	6	22	42	4.433	−20	8	44.09
28	6			4.359			44.28
				4.396			44.19
							+.07

1898 **No. 218.**

Oct. 12	5	22	42	17.833	−14	35	39.11
13	6			17.837			38.97
				17.835			39.04
							+.02

No. 219 Prec.

1899	Mag.	h	m	s	°	′	″
Sep. 15	7½	22	42	37.471	−4	45	11.92
18	7½			37.491			10.64
				37.481			11.28
							−.06

1898 **No. 219 Fol.**

Sep. 13		22	42	34.649	−4	45	29.60
14	8			34.648			29.59
				34.648			29.60
							−.06

1898 **No. 220.**

Sep. 15	8½	22	42	37.044	−4	46	0.52
Oct. 5	8½			37.000			0.61
				37.022			0.56
							−.06

1898 **No. 221.**

Sep. 29	8	22	42	50.546	−20	14	10.45
Oct. 4	8			50.582			9.65
				50.564			10.05
							+.07

1898 **No. 223.**

Sep. 6	6	22	43	8.078	−11	5	39.03
7				. . .			39.10
							39.06
							−.01

1899 **No. 223.**

Sep. 19	6	22	43	11.365	−11	5	20.46
26	6			11.340			19.56
				11.352			20.01
							−.01

1898 **No. 224.**

Oct. 17	6	22	44	18.174	−33	20	40.14
18	6½			18.170			40.80
				18.172			40.47
							+.33

1898 **No. 225.**

Sep. 19		22	44	11.464	−14	7	51.97
20				.510			51.68
Oct. 25				.522			51.46
26				.499			50.94
				11.499			51.51
							+.01
Obs. Lat. B. J.						37	20 25.67
Red. Lat.							25.93
							−.25

1898 **No. 227.**

Sep. 23	6½	22	45	13.918	−39	41	51.02
28				13.934			51.91
				13.926			51.47
							+.63

No. 228.

1898	Mag.	h	m	s	°	′	″
Oct. 19	7	22	44	54.828	−7	59	57.85
20	7½			54.830			58.08
				54.829			57.96
							−.04

No. 229.

1898							
Sep. 13		22	45	43.516	−30	4	35.63
14	6			43.519			35.36
				43.517			35.49
							+.24

No. 230.

1898							
Sep. 15	7	22	45	27.380	−7	51	6.33
Oct. 5	7			27.319			6.35
				27.349			6.34
							−.04

No. 234.

1898							
Sep. 19	5	22	46	51.396	−33	24	59.33
20	6			51.425			59.53
				51.410			59.43
							+.33

No. 235.

1898							
Sep. 6		22	47	17.551	−8	7	20.21
7				...			20.26
Oct. 19				.511			19.86
20				.623			19.83
				17.562			20.04
							−.04
Obs. Lat. B. J.					37	20	25.13
Red. Lat.							25.36
							−.20

No. 239.

1898							
Sep. 23	6	22	48	6.414	−12	9	31.99
28	6			6.458			31.91
				6.436			31.95
							−.01

No. 242.

1898							
Sep. 15	7½	22	48	27.188	−5	11	58.59
Oct. 5	7½			27.106			59.30
				27.147			58.94
							−.06

No. 243.

1898							
Sep. 13		22	48	44.349	−12	43	55.36
14	7			44.324			55.80
				44.336			55.58
							.00

No. 245.

1898							
Sep. 29		22	49	14.227	−16	21	47.80
Oct. 4				14.258			47.10
				14.242			47.45
							+.03
Obs. Lat. B. J.					37	20	25.63
Red. Lat.							25.88
							−.27

No. 246.

1898	Mag.	h	m	s	°	′	″
Oct. 12	6	22	49	15.415	−7	44	48.72
13	5			15.379			47.83
				15.397			48.27
							−.04

No. 247.

1898							
Oct. 17	5	22	49	21.666	−16	48	45.91
18	5½			21.693			45.36
				21.679			45.63
							+.04

No. 250.

1898							
Oct. 19	6	22	49	53.554	−5	31	52.39
20	6			53.532			52.26
				53.543			52.32
							−.05

No. 251.

1898							
Sep. 19	5	22	50	18.078	−33	5	5.35
20	5			18.022			5.52
				18.050			5.43
							+.32

No. 253.

1898							
Sep. 15		22	52	0.914	−30	9	46.66
16				.876			46.33
Oct. 25				.872			46.27
26				.882			46.75
				0.886			46.50
							+.24
Obs. Lat. B. J.					37	20	25.35
Red. Lat.							25.60
							−.48

No. 254.

1898							
Sep. 13		22	52	0.349	−5	21	18.35
14				.357			18.90
Oct. 27				.317			18.22
Nov. 1				.385			18.29
				0.352			18.44
							−.06
Obs. Lat. 303					37	20	25.88
Red. Lat.							26.12
							−.18

No. 256.

1898							
Sep. 23	7	22	52	54.343	−36	3	57.64
28	6			54.375			58.69
				54.359			58.16
							+.43

No. 259.

1898							
Sep. 19	8¼	22	53	13.570	−5	2	51.67
20	8¼			13.504			51.69
				13.537			51.68
							−.06

No. 262.

1898	Mag.	h	m	s	°	′	″
Oct. 12	6	22	54	1.086	−30	0	33.28
13	5			1.057			33.67
				1.071			33.47
							+.24

No. 264.

1898							
Oct. 4	6	22	54	13.437	−13	27	2.20
5	6½			13.456			3.37
				13.446			2.78
							+.01

No. 266.

1898							
Oct. 19	6	22	54	13.805	+0	25	6.52
20	6			13.728			6.38
				13.766			6.45
							−.09

No. 267.

1898							
Oct. 17	6	22	54	34.510	−25	42	33.16
18	6			34.441			31.70
				34.475			32.43
							+.15

No. 268.

1898							
Oct. 27	7	22	54	46.672	−26	41	47.43
Nov. 1	7			46.687			46.44
				46.680			46.93
							+.17

No. 269.

1898							
Oct. 25	7½	22	54	33.852	−2	59	13.69
26	7½			33.859			13.32
				33.856			13.51
							−.07

No. 270.

1898							
Oct. 12	8½	22	54	53.419	−26	40	47.33
13	8½			53.367			46.90
				53.393			47.11
							+.17

No. 272.

1898							
Sep. 13		22	55	0.270	−9	25	36.05
14	7			0.261			36.75
				0.265			36.40
							−.03

No. 274.

1898							
Sep. 15	7	22	55	24.003	−0	21	42.48
Oct. 5	7			24.028			42.28
				24.015			42.38
							−.09

No. 277.

1898							
Sep. 23	7	22	55	53.955	−23	20	17.09
28	6			53.981			17.58
				53.968			17.33
							+.12

No. 278.

1898	Mag.	h	m	s	°	′	″
Oct. 19	6	22	56	5.556	−7	36	31.59
20	6½			5.573			31.57
				5.564			31.58
							−.04

No. 279.

1898							
Sep. 19	7	22	56	14.903	−5	15	34.23
20	6½			14.900			34.28
				14.901			34.25
							−.06

No. 281.

1898							
Sep. 6		22	57	14.860	−7	7	17.92
7				14.870			17.83
				14.865			17.87
							−.04

No. 282.

1898							
Sep. 13		22	57	51.223	−35	18	3.29
14	6			51.220			3.35
				51.221			3.32
							+.40

No. 289.

1898							
Sep. 23		22	59	50.642	−8	14	39.44
28				.640			39.90
Oct. 12				.702			39.18
13				.676			39.79
				50.665			39.58
							−.04
Obs. Lat. 303					37	20	26.64
Red. Lat.							26.90
							−.20

No. 291.

1898							
Sep. 15	7	23	0	0.087	−8	18	17.63
Oct. 5	7			0.109			17.51
				0.098			17.57
							−.04

No. 294.

1898							
Sep. 19	7	23	0	34.051	−8	29	13.97
20	7			34.019			13.52
				34.035			13.75
							−.03

No. 296.

1898							
Oct. 25	5	23	1	7.926	−44	4	16.61
26	4			8.093			19.29
				8.010			17.95
							+1.95

No. 298.

1898							
Sep. 13		23	1	12.927	−39	26	38.80
14	6			12.968			38.93
				12.947			38.87
							+.61

No. 299.

1898	Mag.	h	m	s	°	′	″
Sep. 6		23	1	12.176	−24	17	39.32
7				12.218			39.87
				12.197			39.60
							+.13

No. 302.

1898							
Sep. 29	7½	23	1	53.530	−8	14	41.14
Oct. 4	7½			53.496			41.03
				53.513			41.09
							−.04

No. 305.

1898							
Oct. 19	6	23	2	50.055	−29	22	29.43
20	5			50.059			28.78
				50.057			29.10
							+.22

No. 307.

1898							
Sep. 15	8½	23	3	8.028	−9	33	39.34
Oct. 5	8¼			8.091			39.44
				8.059			39.39
							−.03

No. 313.

1898							
Sep. 13		23	4	0.519	−21	43	34.22
14				0.480			33.92
				0.499			34.07
							+.09
Obs. Lat. B. J.					37	20	25.76
Red. Lat.							25.97
							−.33

No. 314.

1898							
Oct. 27	6	23	4	17.593	−43	24	51.22
Nov. 1	6			17.618			50.09
				17.606			50.65
							+1.66

No. 315.

1898							
Oct. 19	6	23	4	29.014	−41	8	37.25
20	6			29.100			36.18
				29.057			38.72
							+.92

No. 317.

1898							
Sep. 19	5	23	4	28.001	−23	0	38.57
20	5			28.051			37.40
				28.026			37.98
							+.11

No. 2.

1898							
Sep. 6	7½	23	5	22.679	−6	30	50.03
7				22.691			50.02
				22.685			50.03
							−.05

No. 12.

1898							
Sep. 13		23	7	39.655	−10	7	29.22
14	7½			39.666			29.55
				39.660			29.39
							−.02

No. 16.

1898	Mag.	h	m	s	°	′	″
Sep. 6	8	23	9	3.048	−29	0	49.61
7				3.079			49.68
				3.063			49.64
							+.22

No. 17.

1898							
Sep. 15	7¼	23	8	51.579	−3	11	22.81
Oct. 5	7			51.596			23.50
				51.587			23.15
							−.07

No. 18.

1898							
Sep. 23		23	9	19.237	−41	39	32.07
28	6			19.366			32.97
				19.301			32.52
							+1.06

No. 19.

1898							
Sep. 19	4	23	9	2.333	−6	35	56.04
20	4			2.269			55.84
				2.301			55.94
							−.05

No. 22.

1898							
Sep. 13		23	10	32.806	−9	38	36.32
14	5			32.847			36.47
				32.826			36.39
							−.03

No. 24.

1898							
Oct. 19	6½	23	11	12.517	−41	45	6.18
20	7			12.505			6.08
				12.511			6.13
							+1.09

No. 25.

1898							
Sep. 29	7	23	11	10.878	−29	14	24.96
Oct. 4	7			10.824			26.19
				10.851			25.57
							+.22

No. 29.

1898							
Sep. 15	6½	23	11	40.173	−28	59	33.14
Oct. 5	6			40.155			31.67
				40.164			32.40
							+.22

No. 30.

1898							
Oct. 12	5	23	11	33.733	−8	16	58.00
13	5			33.757			58.19
				33.745			58.09
							−.04

No. 32.

1898							
Oct. 17	6	23	12	32.227	−41	22	44.10
18	6			32.286			41.17
				32.256			42.63
							+.98

No. 33.

1898	Mag.	h	m	s	°	′	″
Sep. 19	6	23	12	36.037	−9	44	21.38
20	4			36.048			20.95
				36.042			21.16
							−.02

No. 35.

1898	Mag.	h	m	s	°	′	″
Sep. 6	7½	23	13	1.328	−29	1	59.14
7				1.350			60.37
				1.339			59.75
							+.22

No. 36.

1898	Mag.	h	m	s	°	′	″
Sep. 23	5	23	13	19.023	−33	5	17.01
28	5			19.056			17.42
				19.040			17.21
							+.32

No. 37.

1898	Mag.	h	m	s	°	′	″
Sep. 13		23	13	35.533	−28	56	45.53
14	7			35.500			46.66
				35.516			46.09
							+.21

No. 40.

1898	Mag.	h	m	s	°	′	″
Sep. 29	6	23	13	39.315	−10	10	5.82
Oct. 4	5			39.287			6.18
				39.301			6.00
							−.02

No. 41.

1898	Mag.	h	m	s	°	′	″
Oct. 19	8	23	13	44.575	−14	0	36.66
20	8			44.566			36.17
				44.570			36.42
							+.01

No. 42.

1898	Mag.	h	m	s	°	′	″
Oct. 12	6	23	13	44.806	−14	0	50.21
13	6			44.791			49.77
				44.798			49.99
							+.01

No. 46.

1898	Mag.	h	m	s	°	′	″
Oct. 17	5	23	14	6.653	−5	40	54.17
18	6			6.644			54.42
				6.648			54.29
							−.05

No. 55.

1898	Mag.	h	m	s	°	′	″
Sep. 15	6	23	15	49.512	−27	32	44.34
Oct. 5	6			49.449			42.94
				49.480			43.64
							+.19

No. 61.

1898	Mag.	h	m	s	°	′	″
Sep. 13		23	17	18.357	−15	35	57.01
14	5			18.381			56.78
				18.369			56.89
							+.02

No. 63.

1898	Mag.	h	m	s	°	′	″
Sep. 6		23	17	36.792	−20	39	26.85
7				.834			26.83
29				.883			26.58
Oct. 4				.842			27.18
19				.850			26.67
20				.812			26.44
				36.836			26.76
							+.08
Obs. Lat. 303					37	20	26.26
Red. Lat.							26.33
							−.32

No. 63.

1899	Mag.	h	m	s	°	′	″
Sep. 19		23	17	39.956	−20	39	7.21
26				39.975			7.43
				39.966			7.32
							+.08
Obs. Lat. 303					37	20	26.22
Red. Lat.							26.34
							−.32

No. 64.

1898	Mag.	h	m	s	°	′	″
Sep. 19	7½	23	17	43.682	−11	19	51.63
20	7½			43.689			51.88
				43.685			51.75
							−.01

No. 66.

1898	Mag.	h	m	s	°	′	″
Oct. 25	6½	23	18	9.799	−43	41	5.40
26	6½			9.877			6.11
				9.838			5.75
							+1.77

No. 68.

1898	Mag.	h	m	s	°	′	″
Sep. 23	6½	23	18	17.918	−0	16	7.81
28	6½			17.961			7.54
				17.940			7.68
							−.08

No. 69.

1898	Mag.	h	m	s	°	′	″
Oct. 12	8	23	18	28.243	−9	1	9.93
13	7½			28.232			9.88
				28.237			9.90
							−.03

No. 70.

1898	Mag.	h	m	s	°	′	″
Oct. 17	6	23	18	41.640	−22	19	56.41
18	6½			41.685			56.75
				41.662			56.58
							+.10

No. 76.

1898	Mag.	h	m	s	°	′	″
Sep. 13	8	23	20	31.293	−21	10	18.42
14	8			31.291			18.90
				31.292			18.66
							+.09

No. 78.

1898	Mag.	h	m	s	°	′	″
Sep. 19	5	23	20	41.235	−21	12	4.42
20	4			41.252			3.96
				41.243			4.19
							+.09

No. 79.

1898	Mag.	h	m	s	°	′	″
Sep. 29	8	23	21	1.092	−13	30	41.44
Oct. 4	8			1.063			41.79
				1.078			41.61
							+ 01

No. 80.

1898	Mag.	h	m	s	°	′	″
Sep. 23	8½	23	21	9.150	−21	45	3.95
28	8½			9.244			5.34
				9.197			4.64
							+.09

No. 82.

1898	Mag.	h	m	s	°	′	″
Sep. 6	6	23	21	12.938	−22	18	6.78
7				12.908			6.45
				12.923			6.62
							+.10

No. 85.

1898	Mag.	h	m	s	°	′	″
Sep. 15	7½	23	22	7.840	−13	29	26.52
Oct. 5	7			7.828			26.45
				7.834			26.48
							+.01

No. 87.

1898	Mag.	h	m	s	°	′	″
Oct. 12	6	23	22	32.262	−36	6	24.34
13	6			32.235			22.39
				32.248			23.36
							+.43

No. 90.

1898	Mag.	h	m	s	°	′	″
Oct. 17	6½	23	22	46.733	−12	0	38.60
18	6½			46.687			38.92
				46.710			38.76
							−.01

No. 95.

1898	Mag.	h	m	s	°	′	″
Sep. 13	7	23	24	12.836	−2	21	9.09
14	7			12.795			9.86
				12.815			9.48
							−.07

No. 96.

1898	Mag.	h	m	s	°	′	″
Sep. 23	7	23	24	15.698	−5	5	18.06
28	6½			15.695			18.15
				15.696			18.10
							−.06

No. 97.

1898	Mag.	h	m	s	°	′	″
Sep. 29	6½	23	24	16.375	−1	35	49.41
Oct. 4	6½			16.381			49.67
				16.378			49.54
							−.08

No. 99.

1898	Mag.	h	m	s	°	′	″
Oct. 25	6½	23	25	3.754	−42	32	57.34
26	6½			3.880			59.52
				3.817			58.43
							+1.34

No. 102.

1898	Mag.	h	m	s	°	′	″
Oct. 27	7	23	26	21.606	−42	18	57.21
Nov. 1	6½			21.641			57.54
				21.623			57.37
							+1.27

No. 103.

1898							
Oct. 12	6½	23	26	15.345	−4	38	41.31
13	7			15.328			40.92
				15.336			41.11
							−.06

No. 104.

1898							
Oct. 17	6½	23	26	21.215	−21	55	57.47
18	6			. . .			57.56
							57.51
							+.10

No. 104.

1899							
Sep. 19	6½	23	26	24.349	−21	55	37.43
26	6½			24.366			37.00
				24.357			37.21
							+.10

No. 105.

1898							
Oct. 19	6½	23	26	27.943	−21	48	43.86
20	7			27.924			44.05
				27.933			43.95
							+.09

No. 106.

1898							
Sep. 29	7	23	26	33.486	−12	30	40.63
Oct. 4	7			33.496			41.09
				33.491			40.86
							.00

No. 108.

1898							
Oct. 25	6½	23	26	43.467	−1	38	56.98
26	6			43.544			56.81
				43.506			56.89
							−.08

No. 109.

1898							
Sep. 23	7	23	26	55.370	−12	6	26.40
28	7			55.333			26.07
				55.351			26.23
							−.01

No. 111.

1898							
Sep. 13		23	27	30.110	−38	22	57.23
14	6			30.171			56.78
				30.140			57.00
							+.55

No. 114.

1898							
Sep. 19		23	27	56.396	−21	28	41.40
20				56.356			41.49
				56.376			41.45
							+.09
Obs. Lat. 303					37	20	26.05
Red. Lat.							26.28
							−.33

No. 116.

1898	Mag.	h	m	s	°	′	″
Sep. 15	6	23	28	54.357	−1	48	38.33
Oct. 5	6½			54.338			38.31
				54.347			38.32
							−.08

No. 117.

1898							
Oct. 25	6½	23	29	21.010	−43	14	53.38
26	6¾			21.051			56.34
				21.030			54.86
							+1.60

No. 120.

1898							
Oct. 19	5	23	29	35.336	−43	10	46.87
20	5			35.298			44.68
				35.317			45.78
							+1.56

No. 122.

1898							
Oct. 12	6	23	29	30.899	−15	48	27.12
13	6			30.889			26.79
				30.894			26.96
							+.03

No. 123.

1898							
Sep. 29	7	23	29	48.263	−8	14	29.72
Oct. 4	7			48.250			29.59
				48.257			29.65
							−.04

No. 126.

1898							
Sep. 23		23	30	16.345	−8	1	43.95
28				·377			43.94
Oct. 17				·351			43.91
18				. . .			44.14
27				·371			44.36
Nov. 1				·332			44.45
				16.355			44.12
							−.04
Obs. Lat. 303					37	20	25.72
Red. Lat.							25.98
							−.20

No. 128.

1898							
Sep. 6	6	23	30	23.872	−15	51	44.07
7				23.920			43.63
				23.896			43.85
							+.03

No. 129.

1898							
Sep. 13	8½	23	30	31.680	−6	18	45.53
14	8½			31.705			46.37
				31.692			45.95
							−.05

No. 130.

1898							
Sep. 19	6½	23	30	48.202	−27	26	26.47
20	6½			48.225			26.20
				48.213			26.33
							+.18

No. 131.

1898	Mag.	h	m	s	°	′	″
Sep. 15	7¾	23	31	19.886	−25	48	12.66
Oct. 5	7¾			19.914			11.86
				19.900			12.26
							+.15

No. 133.

1898							
Sep. 29	6	23	32	22.294	−13	37	32.28
Oct. 4	6			22.207			32.54
				22.250			32.41
							+.01

No. 137.

1898							
Sep. 23	7	23	32	44.919	−15	39	24.12
28	7			44.965			24.67
				44.942			24.40
							+.03

No. 140.

1898							
Sep. 19		23	33	22.487	−21	25	55.92
20	8			22.576			56.47
				22.531			56.19
							+.09

No. 143.

1898							
Sep. 15	5	23	34	29.636	−14	47	10.23
Oct. 5	5			29.695			9.41
				29.666			9.82
							+.02

No. 148.

1898							
Oct. 25	6	23	35	17.060	−32	38	13.29
26	5½			17.040			12.65
				17.050			12.97
							+.31

No. 149.

1898							
Oct. 12		23	35	17.550	−19	33	11.28
13	7			17.552			11.81
				17.551			11.54
							+.07

No. 150.

1898							
Sep. 23	7½	23	35	45.854	−32	38	15.27
28	7½			45.888			16.82
				45.871			16.04
							+.31

No. 153.

1898							
Sep. 29	6	23	35	52.190	−12	14	46.33
Oct. 4	5½			52.132			47.19
				52.161			46.76
							.00

No. 154.

1898							
Oct. 17	5	23	36	17.160	−18	35	26.34
18	5			. . .			27.31
							26.82
							+.06

No. 154.

1899	Mag.	h	m	s	°	′	″
Sep. 19	5	23	36	20.216	−18	35	7.60
26	5½			20.259			7.48
				20.237			7.54
							+.06

No. 156.

1898							
Oct. 25	5	23	36	28.122	−18	22	56.38
26	5			28.153			56.85
				28.137			56.61
							+.05

No. 157.

1898							
Sep. 19	7½	23	36	37.559	−6	32	54.35
20	7½			37.672			53.92
				37.615			54.14
							−.05

No. 159.

1898							
Sep. 15		23	37	25.962	−15	6	32.65
Oct. 5				25.984			31.37
				25.973			32.01
							+.02
Obs. Lat. B. J.					37	20	25.72
Red. Lat.							25.94
							−.26

No. 161.

1898							
Oct. 12	7½	23	37	31.951	−11	53	37.66
13	7			32.026			37.91
				31.988			37.78
							−.01

No. 165.

1898							
Sep. 6	5	23	38	54.697	−18	50	34.83
7	5			54.688			34.55
				54.692			34.69
							+.06

No. 167.

1898							
Sep. 13		23	39	10.542	−26	48	44.97
14	7½			10.532			44.07
				10.537			44.52
							+.17

No. 168.

1898							
Sep. 29	8	23	39	4.854	+0	8	49.64
Oct. 4				4.867			49.75
				4.860			49.69
							−.09

No. 169.

1898							
Sep. 19	8	23	39	26.728	−9	1	42.91
20	8			26.701			43.39
				26.714			43.15
							−.03

No. 174.

1898							
Sep. 15	8	23	40	5.638	−14	14	54.90
Oct. 5	7½			5.660			54.10
				5.649			54.50
							+.01

No. 176.

1898	Mag.	h	m	s	°	′	″
Oct. 27	6½	23	40	38.332	−40	44	54.42
Nov. 1	6			38.322			55.25
				38.327			54.83
							+.82

No. 177.

1898							
Sep. 23	7	23	40	43.014	−19	14	43.05
28	6½			43.122			43.79
				43.068			43.42
							+.06

No. 178.

1898							
Oct. 12	7½	23	40	43.585	−14	1	13.64
13	7½			43.571			13.80
				43.578			13.72
							+.01

No. 179.

1898							
Oct. 19	8	23	40	46.618	−0	18	10.31
20	8			46.568			10.36
				46.593			10.33
							−.09

Lac. 9885.

1899							
Oct. 3	7	23	41	11.679	−42	7	9.08
4	7½			11.685			9.61
				11.682			9.34
							+1.20

No. 180.

1898							
Oct. 25	7½	23	41	2.656	−13	55	51.48
26	7½			2.637			51.13
18	7½			. . .			51.10
				2.646			51.24
							+.01

No. 183.

1898							
Sep. 29	7	23	41	21.267	−0	2	7.83
Oct. 4	7			21.293			8.38
				21.280			8.11
							−.09

No. 185.

1898							
Oct. 19	5½	23	42	0.714	−12	28	30.80
20	6			0.725			30.56
				0.719			30.68
							.00

No. 186.

1898							
Sep. 13	8¼	23	42	8.688	−22	50	23.22
14	8¼			8.732			24.09
				8.710			23.66
							+.11

No. 188.

1898							
Sep. 19	6	23	42	41.840	−3	19	43.08
20	6			41.846			42.65
				41.843			42.86
							−.07

No. 189.

1898	Mag.	h	m	s	°	′	″
Sep. 15	7½	23	43	14.149	−19	27	2.71
Oct. 5	7½			14.139			2.73
				14.144			2.72
							+.06

No. 190.

1898							
Oct. 17	6	23	43	17.899	−6	56	48.63
18	6			. . .			48.41
							48.52
							−.05

No. 190.

1899							
Sep. 19	6½	23	43	21.067	−6	56	28.68
26	6			21.087			28.35
				21.077			28.51
							−.05

No. 192.

1898							
Sep. 6		23	43	36.912	−28	41	39.69
7				.820			40.42
Oct. 27				.791			40.27
Nov. 1				.777			40.54
				36.825			40.23
							+.21
Obs. Lat. B. J.					37	20	25.55
Red. Lat.							25.78
							−.45

No. 194.

1898							
Sep. 23	7	23	44	9.306	−22	10	53.28
28	6½			9.398			53.50
				9.352			53.39
							+.10

No. 196.

1898							
Oct. 12	6	23	44	15.465	−16	25	38.90
13	5½			15.460			39.39
				15.462			39.14
							+.03

No. 197.

1898							
Oct. 25	6	23	44	14.073	+0	30	35.42
26	5½			14.029			35.82
				14.051			35.62
							−.09

No. 199.

1898							
Oct. 19	7½	23	44	41.289	−14	54	10.78
20	7½			41.259			10.47
				41.274			10.62
							+.02

No. 200.

1898							
Sep. 13		23	44	58.896	−10	32	36.06
14				58.906			36.11
				58.901			36.09
							−.02
Obs. Lat. 303					37	20	25.52
Red. Lat.							25.73
							−.22

No. 201.

1898	Mag.	h	m	s	°	′	″
Sep. 29	6½	23	45	11.557	−15	8	48.73
Oct. 4	6½			11.458			49.46
				11.508			49.09
							+.02

No. 203.

1898							
Sep. 19	6	23	45	17.524	−14	58	4.73
20	6			17.582			5.14
				17.553			4.93
							+.02

No. 207.

1898							
Sep. 15		23	46	5.270	−19	28	35.17
Oct. 5				.282			35.06
12				.224			34.82
13				.236			34.88
				5.253			34.98
							+.07
Obs. Lat. 303					37	20	26.22
Red. Lat.							26.47
							−.31

No. 210.

1898							
Sep. 23	6	23	47	15.571	−14	49	6.55
28	6			15.630			6.30
				15.600			6.42
							+.02

No. 215.

1898							
Sep. 29	6	23	47	41.185	−3	43	17.99
Oct. 4	6			41.079			18.21
				41.132			18.10
							−.07

No. 222.

1898							
Sep. 6	6½	23	48	4.441	−24	47	47.17
7				4.483			47.78
				4.462			47.47
							+.14

No. 225.

1898							
Sep. 15	6½	23	49	17.816	−40	52	8.30
Oct. 5	6			17.775			8.44
				17.795			8.37
							+.84

No. 227.

1898							
Sep. 13		23	49	33.364	−0	27	28.57
14	6½			33.382			28.67
				33.373			28.62
							−.08

No. 234.

1898							
Sep. 19	7½	23	51	16.079	−30	4	38.94
20	7½			16.082			38.20
				16.080			38.57
							+.24

No. 241.

1898	Mag.	h	m	s	°	′	″
Sep. 13	8¼	23	52	55.418	−4	32	50.21
14	8¼			55.495			51.17
				55.456			50.69
							−.06

No. 243.

1898							
Sep. 15	6½	23	53	6.385	−16	24	54.98
Oct. 5	6½			6.390			54.38
				6.387			54.68
							+.03

No. 244.

1898							
Sep. 23		23	53	27.070	−4	7	18.05
28				.047			18.99
29				.026			18.85
Oct. 4				.043			19.00
19				26.950			18.62
20				26.990			18.65
25				27.050			18.80
26				.031			18.55
				27.026			18.69
							−.06
Obs. Lat. 303					37	20	26.08
Red. Lat.							26.34
							−.18

No. 248.

1898							
Sep. 19	6	23	54	13.284	−30	3	11.66
20	6			13.351			11.41
				13.317			11.54
							+.24

No. 249.

1898							
Oct. 12	7	23	54	26.644	−6	27	33.69
13	6½			26.689			34.08
				26.666			33.88
							−.05

No. 252.

1898							
Oct. 17	7½	23	55	49.200	−6	24	10.01
18	7			49.193			9.44
				49.196			9.72
							−.05

No. 253.

1898							
Sep. 13		23	55	53.722	−6	26	30.86
14	7¾			53.852			31.84
				53.787			31.35
							−.05

No. 254.

1898							
Sep. 29	6	23	56	27.365	−40	43	0.37
Oct. 4	6			27.333			1.26
				27.349			0.81
							+.81

No. 255.

1898	Mag.	h	m	s	°	′	″
Sep. 15	5	23	56	35.787	−3	35	42.59
Oct. 5	5			35.766			42.77
				35.776			42.68
							−.07

No. 256.

1898							
Sep. 23	5	23	56	43.753	−6	34	51.23
28				43.820			51.79
				43.787			51.51
							−.05

No. 258.

1898							
Sep. 6	7	23	56	48.721	−3	20	2.56
7	7			48.867			2.72
				48.794			2.64
							−.07

No. 259.

1898							
Oct. 12	6	23	57	6.164	−30	17	20.16
13	5			6.205			20.78
				6.184			20.47
							+.25

No. 262.

1898							
Oct. 25	6	23	57	43.286	−20	36	58.68
26	6			43.335			58.50
				43.310			58.59
							+.08

No. 264.

1898							
Sep. 19		23	58	30.847	−17	54	13.39
20				.866			13.17
Oct. 17				.866			13.87
18				.821			13.25
				30.850			13.42
							+.05
Obs. Lat. 303					37	20	25.41
Red. Lat.							25.66
							−.29

No. 264.

1899							
Sep. 19		23	58	33.953	−17	53	54.09
26				33.978			53.75
				33.966			53.92
							+.05
Obs. Lat. 303					37	20	25.94
Red. Lat.							26.06
							−.29

No. 266.

1898							
Sep. 13		23	59	16.830	−11	4	37.40
14	6			16.870			37.93
				16.850			37.66
							−.01

No. 270.

1898							
Sep. 15	6	23	59	50.026	−1	4	10.26
Oct. 5	6			50.043			9.89
				50.034			10.07
							−.08

CATALOGUE

OF THE

SOUTHERN STARS OF PIAZZI

FOR THE

EPOCH 1900.0.

THE SOUTHERN STARS OF PIAZZI.

(11) **The Catalogue.** The PIAZZI numbers are given for each star of his list, but the order is often inverted, by the effect of Precession in Right Ascension. A few extra stars are included. The total number, in this catalogue, is 3113, of which 3088 are PIAZZI stars. The observed magnitudes are given to the nearest quarter. For the Fundamental stars, the magnitudes are taken from the Ephemeris, and are given to tenths. For a few stars, of which estimates were not made at the time of observation, the Cordoba magnitude has been given, in brackets.

The epochs are given separately, where two or more observations were made in each of two different years. When one observation was made near the close of one year, and the second early the following year, but one epoch has been given.

No proper motion has been included, in the reduction of the observations to the epoch of this catalogue, 1900.0. Proper motions have been entered, for many stars, in the Notes, mainly from the Catalogue of BOSSERT for those of large amount, and from AUWERS and NEWCOMB, when the stars are contained in the Catalogues of those authorities, and are not used in this series as Fundamental. For the Fundamental stars, the proper motions will be found in the respective lists of Tables III and IV, of the Introduction. In general, it may be assumed that the smaller proper motions, entered here, are those best determined; and where the motion is virtually inappreciable, the note may serve the purpose of settling any question of discordance, as likely to be due to that source. In a few cases, generally of discordance with the places of Cordoba, proper motion has been questioned in the notes. The suspected motion usually exceeds 0".1 annually, in these cases. The preponderance of negative proper motions, in Declination, is noticeable throughout. The observed places have been brought up to the epoch of the Catalogue, 1900.0, by the use of the constants of PETERS and STRUVE, for that date.

m	3ˢ.07272
log. n	1 .302159
log. $\frac{n}{15}$	0 .126068

The corrections to the Poulkova Refractions, from Table II of the foregoing Introduction, have been included in the Declinations of the Catalogue. The correction, applied for each star, will be found entered in the details of the separate

observations, immediately preceding this part of the volume. The intention has been to make every step, in the derivation and application of this correction, plainly evident, in order that any revision of the results may subsequently be easily undertaken. At the same time, it is believed that the Declinations, here presented, are the best that are furnished by the reduction of this series of observations.

As explained with full detail, earlier, the observations have been reduced with such of the Southern PIAZZI stars as Fundamental, as are included in AUWERS' corrected B. J. and 303, the system of the last named having been adopted. In extending the Declinations beyond the limits of the Fundamental stars, comparisons with AUWERS, NEWCOMB, and BOSS have been made, for the determination of the corrections to the Poulkova Refractions, employed throughout.

Star.	Mag.	Epoch.	R. A. 1900.0.	Precess.	Decl. 1900.0.	Precess.	No. Obs.		Notes.
			h m s	s	° ′ ″	″			
P 272	4½	1898.79	0 0 12.984	+3.0729	− 6 16 1.20	+20.052	2	2	Pr. Mo. −ˢ.002 +0″.10
273	6¼	98.80	0 23.456	3.0723	− 10 10 19.26	.052	2	2	
277	6¼	98.82	1 43.007	3.0683	− 23 39 47.09	.051	2	2	
278	6.8	98.83	2 36.669	3.0719	− 3 6 19.53	.051	2	2	Fund. 303.
279	5¼	98.80	2 58.556	3.0610	− 34 5 9.90	.050	2	2	
280	6¼	98.79	3 4.830	3.0718	− 3 0 15.96	.050	2	2	
282	6¼	98.82	3 35.565	3.0717	− 2 46 45.49	.050	2	2	
285	5	98.80	4 15.233	3.0582	− 28 32 40.05	.049	2	2	
286	6½	98.83	4 47.818	3.0712	− 3 7 2.76	.048	2	2	
1	6	98.85	5 11.619	3.0696	− 5 48 15.16	.047	2	2	
3	7¼	98.80	5 16.500	3.0660	− 12 20 31.51	.047	2	2	
4	7	98.79	6 2.416	3.0703	− 3 52 39.05	.045	2	2	
5	5	98.82	6 10.484	3.0624	− 16 1 0.84	.045	2	2	Pr. Mo. −ˢ.008 −0″.26
6	5½	98.80	6 29.798	3.0523	− 28 21 24.37	.044	2	2	
7	5¼	98.83	6 38.991	3.0449	− 35 41 35.15	.044	2	2	
10	7¼	98.80	8 5.415	3.0679	− 5 47 52.47	.040	2	2	
11	7	98.85	8 11.392	3.0349	− 38 22 45.88	.039	2	2	
15	4.6	98.79	9 33.652	3.0530	− 19 29 13.27	.035	2	2	Fund. 303.
15		99.77	33.673		12.97		2	2	
20	6	98.80	9 55.416	3.0315	− 35 27 36.71	.033	2	2	
21	7	98.82	10 9.968	3.0658	− 6 41 34.59	.032	2	2	
23	6	98.80	11 5.397	3.0323	− 32 0 5.98	.029	2	2	
29	7¼	98.83	12 1.106	3.0571	− 12 35 45.87	.025	2	2	
31	7	98.79	12 28.224	3.0468	− 19 36 23.97	.022	2	2	
34	6½	98.82	12 41.309	3.0696	− 2 25 6.80	.021	2	2	
36	7	98.80	13 11.240	3.0693	− 2 34 13.49	.019	2	2	
39	7¼	98.80	13 42.072	3.0565	− 11 30 14.95	.016	2	2	
40	6	98.83	13 43.608	2.9961	− 43 47 29.40	.016	2	2	
42	3.3	98.86	14 19.910	3.0589	− 9 22 41.51	.014	4	4	Fund. B. J.
44	6¼	98.82	15 5.260	3.0514	− 13 37 1.94	.009	2	2	
48	7¼	98.79	16 15.324	3.0030	− 36 21 11.00	.002	2	2	
50	5½	98.80	16 29.781	3.0182	− 29 32 4.55	.000	2	2	
49	8	98.80	16 31.616	3.0437	− 16 45 43.76	.000	2	2	
51	7½	98.85	16 48.956	3.0300	− 23 33 36.02	19.998	2	2	S. p. 10″ dup.
55	6.0	98.84	17 44.310	3.0493	− 12 45 57.40	.992	4	4	Fund. 303.
56	6½	98.83	17 59.771	3.0417	− 16 29 53.01	.990	2	2	
57	6½	98.80	18 12.352	3.0074	− 31 35 26.18	.989	2	2	
60	6	98.79	19 23.025	3.0672	− 2 46 20.09	.980	2	2	
62	7¼	98.85	19 45.361	3.0477	− 12 15 52.83	.978	2	2	
63	7¼	98.80	19 50.192	3.0383	− 16 34 56.56	.977	2	2	

Star.	Mag.	Epoch.	R. A. 1900.0.	Precess.	Decl. 1900.0.	Precess.	No. Obs.		Notes.
			h m s	s	° ′ ″	″			
P 67	6¾	1898.82	0 20 47.213	+3.0537	− 8 54 19.41	+19.970	2	2	
68	5½	98.87	21 17.174	2.9520	−44 14 6.92	.966	3	3	
69	2	98.83	21 20.549	2.9575	−42 50 55.88	.965	2	2	Pr. Mo. +ˢ.016 −0″.39
70	6¼	98.80	21 29.609	3.0714	− 0 36 12.59	.964	2	2	
72	7	98.79	21 59.299	3.0603	− 5 33 24.41	.960	2	2	
78	6¾	98.80	22 56.060	3.0438	−12 12 42.92	.952	2	2	Red.
79	5	98.82	22 58.208	2.9840	−33 33 33.68	.951	2	2	
81	6	98.85	23 30.716	2.9560	−40 28 2.92	.947	2	2	
82	6½	98.83	24 6.146	3.0425	−12 9 6.99	.941	2	2	
83	6¾	98.80	24 22.718	3.0627	− 4 1 20.54	.939	2	2	
84	6	98.87	24 29.218	2.9479	−41 13 6.38	.938	2	2	
87	7	98.85	24 47.294	3.0685	− 1 40 5.68	.935	2	2	
88	6	98.79	24 47.800	3.0329	−15 24 58.12	.935	2	2	Pr. Mo. +ˢ.012 0″.00
89	6.0	98.80	24 56.049	3.0613	− 4 30 34.92	.934	2	2	Fund. B. J.
91	5.3	98.87	25 22.703	3.0059	−24 20 27.99	.929	2	2	Fund. 303.
94	6	98.83	25 34.774	2.9410	−41 29 35.50	.927	2	2	
96	6	98.82	25 55.714	3.0444	−10 38 12.38	.924	2	2	Prec.
100	6¼	98.80	27 2.774	3.0192	−18 46 24.57	.913	2	2	
106	7¼	98.79	28 5.385	3.0602	− 4 23 59.88	.902	2	2	
107	6¾	98.85	28 22.108	3.0694	− 1 9 35.35	.899	2	2	
109	5½	98.82	28 44.288	2.9757	−30 6 33.34	.894	2	2	
111	6½	98.83	28 49.762	2.9529	−35 32 21.68	.894	2	2	N. p. dup. Pr. Mo. −0″.53
113	7	98.87	29 23.396	3.0575	− 5 5 52.99	.887	2	2	S. p.
117	5½	98.80	30 5.959	3.0600	− 4 8 35.56	.880	2	2	Pr. Mo. +ˢ.027 −0″.02
120	6	98.82	30 24.705	3.0695	− 1 3 18.08	.876	2	2	
129	7¼	98.79	31 50.697	3.0599	− 3 57 2.47	.859	2	2	
130	6	98.80	32 12.376	2.9843	−25 19 4.01	.855	2	2	Pr. Mo. +ˢ.104 −0″.03
132	8¼	98.83	32 51.497	3.0508	− 6 32 53.72	.846	2	2	
133	6.8	98.84	32 57.712	3.0692	− 1 3 12.51	.845	4	4	Fund. 303.
142	7	98.79	34 40.975	3.0310	−11 41 48.98	.823	2	2	
144	6¼	98.80	35 27.595	3.0095	−17 3 53.30	.813	2	2	
146	6	98.80	35 36.850	3.0550	− 4 54 2.11	.810	2	2	Fol.
151	6¾	98.82	36 30.772	2.9919	−20 50 55.16	.798	2	2	
152	6¼	98.83	37 11.511	3.0254	−12 21 9.90	.789	2	2	
153	6½	98.86	37 11.580	2.8665	−43 40 27.58	.789	1	1	
153	6¾	99.73	11.566		25.37		2	2	
155	7	98.79	37 41.951	2.9898	−20 44 30.96	.781	2	2	
158	6¼	98.85	37 54.239	2.8944	−39 0 40.66	.778	2	2	
157	7¼	98.80	37 55.726	3.0558	− 4 24 16.61	.778	2	2	
159	2.0	98.80	38 34.169	2.9977	−18 32 8.19	.769	2	2	Fund. B. J.
161	6¼	98.88	38 47.961	3.0226	−12 33 14.46	.765	2	2	
163	5	98.82	39 8.753	3.0279	−11 9 14.65	.760	2	2	Pr. Mo. −ˢ.003 −0″.11
164	5¾	98.83	39 22.026	2.8879	−38 58 23.28	.757	2	2	
166	5¼	98.87	39 47.486	2.9768	−22 33 21.91	.751	2	2	
169	6¾	98.85	39 57.617	3.0205	−12 41 28.34	.748	2	2	
167	7	98.80	40 1.808	3.0715	− 0 17 33.35	.747	2	2	
173	6¼	98.88	40 13.519	2.8533	−43 13 18.38	.744	2	2	
171	6	98.79	40 18.642	3.0515	− 5 10 39.01	.743	2	2	
172	6	98.82	40 27.301	3.0167	−13 25 19.88	.741	2	2	Pr. Mo. −ˢ.004 −0″.21
174	6½	98.80	40 41.738	3.0007	−16 58 15.95	.737	2	2	
188	7¼	98.79	42 48.066	3.0443	− 6 32 17.02	.703	2	2	
198	6	98.80	44 24.188	3.0081	−14 6 12.93	.677	2	2	
200	6¾	98.82	44 40.933	3.0345	− 8 23 40.58	.672	2	2	
201	5.4	98.84	45 7.093	3.0210	−11 10 58.36	.665	6	6	Fund. 303.
205	6¾	98.83	45 22.621	2.8193	−43 56 24.35	.660	2	2	
210	6¾	98.79	46 17.481	3.0257	− 9 57 0.57	.645	2	2	
212	6¾	98.85	47 12.144	2.8064	−44 15 9.83	.628	2	2	
213	5	98.80	47 53.800	3.0645	− 1 41 14.28	.616	2	2	
219	7¼	98.79	48 42.085	3.0000	−14 27 48.38	.601	2	2	
222	6¼	98.80	49 14.833	3.0261	− 9 16 55.31	.591	2	2	

Star.	Mag.	Epoch.	R. A. 1900.0.	Precess.	Decl. 1900.0.	Precess.	No. Obs.		Notes.
			h m s	s	° ′ ″	″			
P 230	6	1898.8c	0 50 39.148	+3.0321	− 7 53 16.45	+19.564	2	2	
235	5.8	98.83	51 0.642	3.0110	−11 48 28.88	.558	4	4	Fund. 303.
249	5¾	98.80	53 43.494	3.0072	−11 55 11.48	.504	2	2	
250	4½	98.85	53 47.260	2.8940	−29 53 53.38	.502	2	2	Pr. Mo. −ˢ.003 −0″.02
251	7	98.87	54 15.772	3.0741	+ 0 14 31.66	.493	2	2	Pr. Mo. − .010 −0 .13
265	6	98.80	57 39.904	2.8640	−32 5 26.15	.421	2	2	
266	5¾	98.79	57 59.020	3.0413	− 5 22 16.89	.414	2	2	
284	6¼	98.80	1 0 36.223	3.0079	−10 30 51.36	.355	2	2	
286	6	98.79	1 4.112	3.0083	−10 22 30.39	.344	2	2	
288	7¼	98.80	1 25.953	3.0084	−10 18 8.00	.336	2	2	
296	5¾	98.82	2 44.465	3.0069	−10 19 13.83	.306	2	2	
303	6	98.80	3 13.739	2.7447	−42 1 19.58	.294	2	2	
300	3.1	98.79	3 33.513	3.0035	−10 42 44.00	.286	2	2	Fund. B. J.
2	6¼	98.80	5 10.969	3.0104	− 9 26 16.01	.246	2	2	
10	6¼	98.79	6 38.316	3.0541	− 2 46 55.81	.211	2	2	
14	6¾	98.80	7 45.673	3.0227	− 7 18 50.02	.182	2	2	
18	7	98.80	8 8.056	2.7910	−35 44 10.39	.172	2	2	
20	6	98.82	8 9.018	2.7624	−38 23 11.76	.172	2	2	Pr. Mo. +ˢ.003 −0″.02
22	7¼	98.83	9 20.089	3.0136	− 8 26 54.39	.141	2	2	Pr. Mo. + .006 +0 .28
24	5¾	98.79	9 21.776	3.0134	− 8 27 37.49	.141	2	2	Pr. Mo. + .006 +0 .27
25	6	98.80	9 42.718	3.0622	− 1 30 32.36	.131	2	2	Pr. Mo. +ˢ.003 +0″.22
32	6.0	98.82	11 31.628	3.0510	− 3 1 35.75	.083	4	4	Fund. 303.
33	6½	98.79	11 51.798	3.0525	− 2 48 10.88	.075	2	2	Pr. Mo. +ˢ.017 −0″.13
38	6½	98.80	12 40.821	3.0127	− 8 11 14.76	.052	2	2	
47	6	98.79	14 41.473	3.0650	− 1 2 2.85	18.997	2	2	
58	6½	98.79	17 27.858	3.0652	− 0 58 21.43	.917	2	2	
65	7	98.83	17 59.785	2.6399	−44 7 37.00	.902	2	2	
68	6¼	98.82	18 48.982	2.8637	−24 52 31.64	.878	2	2	3″ dup. prec.
66	6¼	98.80	19 0.709	3.0050	− 8 31 39.29	.873	2	2	
67	3.0	98.83	19 1.456	3.0036	− 8 41 57.51	.872	4	4	Fund. B. J.
76	6¼	98.80	20 15.214	2.6596	−42 0 46.76	.835	2	2	
78	6¼	98.85	20 21.379	2.6128	−45 2 57.08	.832	2	2	
75	5	98.79	20 42.199	2.9482	−15 7 8.30	.822	2	2	
82	5½	98.82	21 55.486	2.9598	−13 34 35.68	.785	2	2	
94	3	98.87	24 1.397	2.6127	−43 49 51.54	.719	2	2	Pr. Mo. +ˢ.005 −0″.21
96	5.3	98.85	24 48.292	2.8760	−22 8 48.20	.695	2	2	Fund. 303.
99	6¼	98.80	25 40.110	2.8270	−26 43 26.97	.667	2	2	
103	7½	98.79	27 22.778	2.8496	−24 9 39.34	.613	2	2	
108	6½	98.80	28 4.354	2.9886	− 9 31 43.59	.590	2	2	
109	6	98.82	28 27.685	2.6883	−37 22 42.62	.577	2	2	
117	5¼	98.80	29 44.622	2.9246	−16 11 19.35	.535	2	2	
122	7	98.79	30 30.104	2.9455	−13 53 38.09	.510	2	2	
125	5.8	98.86	31 6.320	2.9252	−15 54 41.85	.489	4	4	Fund. 303.
127	6	98.80	31 31.191	2.7676	−30 25 10.47	.475	2	2	2″ dup. mean.
134	8	98.82	32 27.658	2.8221	−25 31 33.35	.443	2	2	
131	6¼	98.80	32 37.748	2.9808	− 9 54 57.75	.437	2	2	Pr. Mo. +ˢ.018 +0″.06
141	6¼	98.80	34 0.900	2.6705	−37 2 1.09	.388	2	2	
140	7	98.79	34 8.377	2.8178	−25 31 51.23	.384	2	2	
147	7	98.82	35 16.829	2.6513	−37 58 48.92	.344	2	2	1ˢ.7 fol.
153	8¼	98.80	36 25.013	2.8496	−22 13 30.94	.304	2	2	2″ dup. fol.
156	6¼	98.79	37 4.057	2.6336	−38 38 25.18	.281	2	2	
157	6	98.80	37 37.818	2.7163	−32 49 52.89	.260	2	2	
158	5	98.82	37 38.511	2.6513	−37 20 12.64	.259	2	2	Pr. Mo. −ˢ.005 −0″.04
160	6¼	98.83	38 52.567	3.0212	− 5 16 5.27	.214	2	2	
163	3.3	98.82	39 25.476	2.9067	−16 27 51.54	.195	4	4	Fund. B. J.
168	5.1	98.83	40 57.758	2.8002	−25 33 9.34	.138	4	4	Fund. B. J. S. pr.
167	5.8	98.85	40 58.037	3.0104	− 6 14 1.03	.137	4	4	Fund. 303.
178	6½	98.79	43 25.850	2.6228	−37 39 33.37	.044	2	2	
180	7¼	98.80	43 58.621	2.7774	−26 45 6.91	.023	2	2	
182	7	98.80	44 28.627	2.9562	−11 11 54.01	.004	2	2	S. pr.

Star.	Mag.	Epoch.	R. A. 1900.0.	Precess.	Decl. 1900.0.	Precess.	No. Obs.		Notes.
			h m s	s	° ′ ″	″			
P 183	4½	1898.82	1 44 40.398	+2.9562	−11 10 51.40	+17.996	2	2	Pr. Mo. −ˢ.015 −0″.10
188	6½	98.79	45 29.965	2.5934	−38 54 27.96	.965	2	2	Pr. Mo. .000 +0 .26
192	3.0	98.83	46 31.415	2.9581	−10 49 44.21	.925	4	4	Fund. B. J.
198	6½	98.80	47 10.580	2.5612	−40 19 48.44	.900	2	2	
206	6¼	98.79	49 4.954	2.5751	−39 5 18.88	.823	2	2	
212	5¼	98.82	50 13.133	2.4963	−42 59 15.28	.778	2	2	
218	5¼	98.80	51 59.212	2.8062	−23 0 55.26	.706	2	2	
229	7	98.80	54 17.360	2.5040	−41 39 21.05	.610	2	2	
231	5½	98.80	55 3.908	2.8218	−21 18 38.17	.577	2	2	
232	4.0	98.79	55 17.565	2.8181	−21 33 45.01	.568	1	1	Fund. B. J.
235	6	98.82	55 31.522	2.4809	−42 30 47.84	.558	2	2	
241	5¾	98.85	56 46.826	2.6889	−30 28 56.91	.505	2	2	
248	5¼	98.82	57 41.931	2.4119	−45 11 42.09	.466	2	2	
244	6	98.80	58 3.885	3.0687	− 0 21 12.92	.450	2	2	
246	6¾	98.80	58 23.861	3.0172	− 4 48 39.95	.436	2	2	
247	6.5	98.86	58 40.969	3.0633	− 0 49 11.20	.424	5	5	Fund. 303.
251	5½	98.85	2 0 0.499	2.6885	−29 46 36.37	.366	2	2	
270	6¾	98.85	4 1.673	2.4449	−42 21 19.61	.187	2	2	
265	7.4	98.81	4 5.511	3.0390	− 2 48 16.25	.184	2	2	Fund. 303.
7	6	98.88	5 9.910	2.4026	−43 59 21.28	.136	2	2	
10	6	98.87	5 42.375	2.4596	−41 20 21.10	.111	2	2	
14	6¼	98.92	6 5.592	2.3910	−44 17 17.68	.093	2	2	
9	6	98.85	6 31.110	3.0446	− 2 17 42.97	.074	2	2	
17	8	98.91	7 40.131	3.0374	− 2 51 49.32	.021	2	2	Pr. Mo. +ˢ.024 −0″.06
18	6½	98.88	7 40.944	3.0374	− 2 51 39.83	.021	2	2	Pr. Mo. + .024 −0 .06
28	5.2	98.93	8 30.268	2.6423	−31 11 34.49	16.982	4	4	Fund. B. J.
26	7¼	98.87	8 38.828	3.0292	− 3 29 58.18	.976	2	2	
42	6	98.85	10 29.188	2.4321	−41 37 58.67	.889	2	2	Pr. Mo. −ˢ.007 −0″.04
50	6¾	98.92	11 22.332	2.4305	−41 32 7.90	.847	2	2	
44	8¼	98.87	11 46.476	3.0299	− 3 22 6.34	.828	2	2	N.
48	7¼	98.88	11 58.843	2.9828	− 7 2 31.32	.819	2	2	
47	6.0	98.85	11 59.702	2.9849	− 6 52 58.41	.818	2	2	Fund. B. J.
56	Var.	98.88	14 17.549	3.0284	− 3 25 53.76	.707	2	2	Fund. B. J.
57	8¾	98.87	14 25.366	3.0284	− 3 25 33.54	.701	2	2	N. fol.
59	6¼	98.85	14 29.718	2.7049	−26 25 8.55	.697	2	2	Pr. Mo. −ˢ.016 +0″.43
58	7¼	98.91	14 39.198	3.0104	− 4 48 20.49	.690	2	2	
67	8½	98.87	16 33.994	3.0278	− 3 25 5.92	.596	2	2	
66	7¼	98.88	16 36.828	3.0621	− 0 48 29.17	.594	2	2	
69	5¾	98.92	16 49.132	3.0719	− 0 3 40.28	.584	2	2	
70	6	98.85	17 6.602	3.0551	− 1 20 24.22	.570	2	2	
73	5.2	98.91	17 58.017	2.7314	−24 16 14.58	.528	2	2	Fund. 303.
77	6	98.94	18 16.578	2.3491	−43 39 25 97	.513	2	2	
80	6¼	98.88	19 55.111	3.0294	− 3 13 57.61	.430	2	2	
81	8	98.91	19 59.992	3.0752	+ 0 11 6.12	.427	2	2	
90	6¼	98.85	20 32.342	2.3970	−41 17 48.12	.399	2	2	
87	5.0	98.87	21 7.093	2.8981	−12 44 29.02	.369	2	2	Fund. 303.
99	5½	98.88	23 47.910	2.5382	−34 15 32.85	.234	2	2	
104	6½	98.85	25 21.395	2.7344	−23 7 42.72	.153	2	2	
106	6½	98.91	25 44.028	2.6918	−25 37 56.47	.134	2	2	Pr. Mo. +ˢ.008 0″.00
107	6	98.87	25 59.225	2.7354	−22 59 20.38	.120	2	2	
108	7¼	98.88	26 18.715	2.8506	−15 34 42.35	.103	2	2	
110	5½	98.91	27 3.964	3.0521	− 1 28 34.73	.064	2	2	
113	5.0	98.92	27 20.861	2.8477	−15 41 0.29	.049	2	2	Fund. 303.
120	6	98.87	28 56.907	2.5045	−35 5 24.11	15.965	2	2	Pr. Mo. −ˢ.006 −0″.01
122	6¼	98.88	29 28.019	2.6291	−28 40 17.90	.938	2	2	5″ dup. N. f.
121	6	98.92	29 46.552	2.9542	− 8 17 45.47	.921	2	2	
124	7	98.91	30 19.078	3.0160	− 3 59 8.48	.891	2	2	Pr. Mo. −ˢ.012 −0″.44
127	7¾	98.87	30 31.511	3.0171	− 3 53 40.86	.881	2	2	
131	6	98.88	31 4.688	2.9538	− 8 15 59.67	.851	2	2	
137	5	98.85	31 50.579	2.5887	−30 28 50.84	.810	2	2	

Star.	Mag.	Epoch.	R. A. 1900.0.	Precess.	Decl. 1900.0.	Precess.	No. Obs.		Notes.
			h m s	s	° ′ ″	″			
P 138	6.0	1898.92	2 32 39.461	+3.0174	− 3 49 44.29	+15.766	2	2	Fund. 303.
141	5¾	98.87	32 49.515	2.4937	− 35 0 19.37	.757	2	2	Pr. Mo. −ˢ.003 −0″.28
147	6	98.88	33 59.959	2.5802	− 30 37 29.06	.694	2	2	
144	4.0	98.91	34 21.318	3.0712	− 0 6 9.72	.674	2	2	Fund. B. J.
145	7¼	98.92	34 27.373	2.8927	− 12 10 47.69	.668	2	2	
149	5	98.85	34 43.585	2.8906	− 12 17 47.79	.654	2	2	Pr. Mo. +ˢ.008 −0″.25
158	5	98.91	35 59.268	2.2794	− 43 19 17.82	.584	2	2	
152	6½	98.87	36 6.544	3.0563	− 1 7 15.17	.578	2	2	Pr. Mo. +ˢ.013 −0″.15
159	4	98.88	36 43.244	2.3569	− 40 17 1.01	.544	2	2	Pr. Mo. + .007 −0.03
168	6¼	98.85	38 7.685	2.3885	− 38 48 38.50	.466	2	2	
170	4.0	98.87	39 21.772	2.8547	− 14 16 55.54	.397	2	2	Fund. B. J.
173	6½	98.92	39 27.345	2.3291	− 40 57 11.46	.392	2	2	
176	6¼	98.91	40 8.817	2.5154	− 32 56 50.28	.352	2	2	
175	5	98.88	40 26.109	2.7764	− 18 59 45.14	.337	2	2	Pr. Mo. +ˢ.022 +0″.05
187	7½	98.85	42 57.277	2.3969	− 37 45 51.48	.194	2	2	
189	6¼	98.87	43 30.374	2.4379	− 35 58 4.01	.162	2	2	
194	7½	98.81	44 38.446	2.3898	− 37 49 7.94	.097	2	2	N. pr. 8 mag. fol.
195	5¼	98.88	44 54.346	2.5044	− 32 49 32.88	.082	2	2	Pr. Mo. +ˢ.005 +0″.15
196	8	98.94	45 6.932	2.5045	− 32 47 39.38	.070	2	2	N. fol.
197	7½	98.92	45 11.762	2.5378	− 31 13 44.40	.065	2	2	
198	5½	98.87	45 25.144	2.6614	− 24 58 17.60	.052	2	2	
200	5½	98.85	45 34.270	2.5957	− 28 21 24.56	.043	2	2	
204	5	98.91	46 12.152	2.4224	− 36 15 28.44	.006	2	2	
202	4.6	98.88	46 30.108	2.7245	− 21 24 58.22	14.989	2	2	Fund. B. J.
205	5	98.94	46 37.933	2.4251	− 36 5 14.33	.981	2	2	
207	6½	98.92	46 55.798	2.3169	− 40 20 41.89	.965	2	2	
208	6¼	98.85	47 42.183	2.5312	− 31 13 42.45	.919	2	2	
209	7¼	98.87	48 33.883	2.9266	− 9 15 24.39	.869	2	2	
216	6¼	98.88	49 39.279	2.3466	− 38 50 46.22	.805	2	2	
219	3.0	98.91	51 32.518	2.9238	− 9 17 45.63	.693	2	2	Fund. B. J.
225	5½	98.85	52 56.960	2.6600	− 24 15 47.49	.609	2	2	
226	6½	98.88	52 59.179	2.5384	− 30 15 26.23	.606	2	2	
229	6	98.91	53 38.784	2.6635	− 24 0 30.37	.567	2	2	
232	6½	98.94	53 38.812	2.3396	− 38 35 33.43	.567	2	2	
238	4½	98.88	54 28.192	2.2794	− 40 42 19.77	.517	2	2	Pr. Mo. −ˢ.008 +0″.03
239	6	98.92	54 29.011	2.2793	− 40 42 20.61	.516	2	2	S. fol.
231	6	98.85	54 38.179	3.0266	− 2 51 46.34	.507	2	2	
241	5½	98.87	55 12.024	2.6280	− 25 40 29.91	.474	2	2	
243	6	98.94	55 30.984	2.4732	− 32 54 19.69	.455	2	2	
240	6½	98.91	55 48.516	3.0196	− 3 16 31.88	.436	2	2	
242	6¼	98.92	56 14.981	2.9411	− 8 3 24.97	.410	2	2	
248	6	98.87	57 18.958	2.5662	− 28 28 26.60	.345	2	2	
247	5½	98.88	57 47.686	2.9399	− 8 4 42.69	.315	2	2	
249	3.8	98.89	57 58.961	2.6553	− 24 0 59.84	.303	4	4	Fund. 303.
252	5	98.91	59 21.733	2.9404	− 7 59 30.87	.219	2	2	
258	6¼	98.87	3 0 20.131	2.1493	− 44 17 19.66	.158	2	2	
267	6	98.85	3 34.510	2.5577	− 28 12 52.18	13.957	2	2	
10	7	98.85	7 36.848	2.5196	− 29 32 16.60	.701	2	2	
8	5.3	98.87	7 40.114	3.0460	− 1 34 11.87	.698	2	2	Fund. 303.
13	3.3	98.88	7 49.339	2.5226	− 29 22 52.58	.688	2	2	Fund. B. J.
19	6	98.92	8 55.030	2.0985	− 44 47 41.81	.618	2	2	
17	6	98.92	9 6.399	2.3509	− 36 19 6.23	.605	3	2	
18	6¼	98.88	9 27.654	2.5009	− 30 10 38.86	.582	2	2	
20	6¼	98.87	10 40.091	2.9137	− 9 8 25.07	.504	2	2	
24	6½	98.85	10 42.212	2.5806	− 26 28 15.45	.502	2	2	
25	6½	98.92	10 44.102	2.3564	− 35 55 46.79	.500	2	2	Pr. Mo. +ˢ.002 +0″.02
22	4.3	98.92	10 58.484	2.9126	− 9 11 27.83	.485	2	2	Fund. 303.
26	6	98.88	11 44.900	2.9062	− 9 31 28.23	.435	2	2	
35	6¾	98.87	12 37.639	2.3476	− 36 3 32.54	.377	2	2	
31	5½	98.85	13 15.280	3.0502	− 1 17 39.67	.337	2	2	Pr. Mo. +ˢ.016 −0″.06

Star.	Mag.	Epoch.	R. A. 1900.0.	Precess.	Decl. 1900.0.	Precess.	No. Obs.		Notes.
			h m s	s	° ′ ″	″			
P 39	5	1898.92	3 13 56.800	+2.6504	−22 52 36.59	+13.291	2	2	
43	3.6	98.91	15 4.069	2.6641	−22 7 19.15	.218	2	2	Fund. 303.
47	4	98.85	15 55.760	2.1172	−43 27 11.47	.160	2	2	Pr. Mo. +s.271 +0.″76
69	7¼	98.91	22 3.932	2.3157	−36 16 15.95	12.751	2	2	
73	6¾	98.92	22 37.388	2.1423	−41 59 16.53	.713	2	2	
76	6	98.85	23 40.905	2.3180	−36 1 45.01	.642	2	2	
81	6½	98.92	24 17.168	2.0613	−44 12 11.01	.600	3	3	
79	6¼	98.87	24 20.056	2.3115	−36 11 58.24	.597	2	2	
80	4.8	98.90	25 39.233	2.9736	−5 25 4.60	.507	4	4	Fund. 303.
88	6¼	98.85	26 39.798	2.1383	−41 42 26.90	.438	2	2	
89	3.0	98.90	28 13.184	2.8907	−9 47 47.78	.330	4	4	Fund. B. J.
95	5	98.85	29 22.209	2.6458	−21 58 5.46	.251	2	2	Pr. Mo. +s.002 −0″.02
98	6¾	98.87	31 39.375	3.0776	+0 15 42.05	.092	2	2	Pr. Mo. −.002 −0.16
101	5.0	98.85	31 43.996	2.7303	−17 47 52.71	.086	2	2	Fund. 303.
100	5	98.88	31 46.057	3.0745	+0 5 4.74	.084	2	2	
108	7	98.92	32 25.718	2.0386	−44 2 51.00	.038	3	2	
113	4½	98.92	33 30.375	2.1531	−40 36 11.78	11.963	2	2	Pr. Mo. −s.003 −0″.02
109	6¼	98.87	34 4.831	2.9608	−5 56 47.98	.923	2	2	
114	6	98.85	34 38.010	2.4937	−28 16 10.86	.883	2	2	
117	8	98.88	34 54.324	2.4913	−28 20 43.71	.864	2	2	
116	5½	98.91	35 41.204	2.9681	−5 32 1.05	.809	2	2	
126	7¼	98.92	36 11.068	2.1427	−40 40 35.92	.773	2	2	Fol.
140	7½	98.88	37 36.984	2.1248	−41 5 20.32	.669	2	2	
142	5¼	98.87	38 16.313	2.3853	−32 15 28.41	.625	2	2	Pr. Mo. −s.003 0″.00
134	3.0	98.85	38 27.405	2.8786	−10 6 7.09	.612	2	2	Fund. B. J.
138	5½	98.91	38 47.183	2.8645	−10 48 7.71	.588	2	2	
149	5	98.88	39 7.601	2.2308	−37 37 45.29	.565	2	2	
143	5.8	98.92	39 25.710	3.0445	−1 28 43.09	.543	2	2	Fund. 303.
145	5¾	98.87	39 49.553	3.0610	−0 36 40.83	.515	2	2	
154	4½	98.85	41 24.835	2.8306	−12 24 54.82	.401	2	2	
169	6	98.92	42 22.886	2.4449	−29 38 56.57	.331	2	2	
168	4.0	98.91	42 32.747	2.5919	−23 32 42.12	.318	4	4	Fund. B. J.
174	7	98.91	43 18.051	2.4400	−29 46 34.49	.265	2	2	
173	5¼	98.87	43 21.611	2.5768	−24 11 4.60	.260	2	2	
176	5¾	98.88	43 53.568	2.4210	−30 28 8.56	.221	2	2	Pr. Mo. s.000 −0″.28
180	6¾	98.85	44 3.919	2.2551	−36 24 50.55	.208	2	2	
182	6	98.92	44 54.148	2.2068	−37 55 41.68	.148	2	2	S. pr.
183	5¼	98.87	44 54.411	2.2069	−37 55 33.29	.148	2	2	N. fol.
181	7¼	98.91	45 23.137	2.9680	−5 22 44.97	.112	2	2	
189	4½	98.85	45 42.683	2.2485	−36 30 11.65	.089	2	2	Pr. Mo. −s.005 −0″.05
193	7	98.92	47 8.290	2.1579	−39 17 5.71	10.985	2	2	
190	6½	98.88	47 33.702	2.9678	−5 21 15.25	.954	2	2	
191	5.6	98.92	47 45.143	2.9617	−5 39 35.54	.940	4	4	Fund. 303.
195	5	98.87	49 16.061	3.0088	−3 15 1.47	.828	2	2	S. fol.
198	5¼	98.92	49 27.381	2.5500	−24 54 29.67	.815	2	2	
202	5¾	98.85	49 50.304	2.2828	−35 1 41.31	.786	2	2	
200	7½	98.88	50 12.152	2.9687	−5 16 12.43	.759	2	2	
206	6	98.87	50 53.021	2.1023	−40 39 5.93	.709	2	2	
209	7	98.91	51 40.096	2.1538	−39 3 5.04	.651	2	2	
205	6¼	98.92	51 48.141	2.7926	−13 53 18.28	.641	2	2	
216	6¾	98.85	52 54.599	2.1442	−39 15 6.87	.559	2	2	
210	3.0	98.87	53 21.780	2.7934	−13 47 34.43	.526	2	2	Fund. B. J.
221	5	98.85	55 39.640	2.5559	−24 17 59.88	.357	2	2	Pr. Mo. −s.001 +0″.01
230	7	98.92	56 4.165	1.9582	−44 12 4.46	.323	2	2	
222	5¾	98.88	56 27.917	3.0361	−1 49 47.09	.294	2	2	
229	6	98.91	56 41.205	2.3892	−30 46 20.14	.276	2	2	
225	7¼	98.87	57 13.033	3.0344	−1 54 38.85	.236	2	2	
226	5½	98.85	57 29.119	3.0619	−0 32 24.63	.216	2	2	Pr. Mo. +s.008 −0″.28
—	6½	99.11	58 13.037	2.2732	−34 45 36.20	.161	2	2	Lacl. 1326.
241	7¼	98.88	58 18.107	2.4388	−28 48 27.57	.155	2	2	

Star.	Mag.	Epoch.	R. A. 1900.0.	Precess.	Decl. 1900.0.	Precess.	No. Obs.		Notes.	
			h m s	s	° ′ ″	″				
P 251	5½	1898.94	4 1 30.084	+2.4568	−27 55 31.59	+9.913	2	2	Pr. Mo. +s.014	+0″.10
2	8	98.94	4 47.246	2.6238	−20 58 2.86	.661	2	2		
262	7	98.91	4 49.372	2.9942	− 3 50 11.83	.659	2	2		
3	5½	98.98	5 29.736	2.9248	− 7 11 6.33	.608	2	2		
11	4.4	98.94	6 58.968	2.9260	− 7 5 53.48	.492	3	3	Fund. B. J.	
20	5	98.92	7 28.471	2.0018	−42 15 18.33	.455	2	2	Pr. Mo. +s.016	0″.00
15	9	98.91	7 47.418	2.9260	− 7 5 26.24	.431	2	2	S. pr.	
30	6	98.99	9 20.630	1.9042	−44 37 24.64	.311	2	2		
26	5.0	98.98	9 38.177	2.8531	−10 30 15.98	.289	2	2	Fund. 303.	
29	5	98.91	10 40.299	2.9099	− 7 48 26.32	.209	2	2	Pr. Mo. −s.149	−3″.46
34	4½	98.92	10 41.278	1.9830	−42 32 28.91	.206	2	2	Pr. Mo. +s.001	−0″.23
50	4	98.92	14 6.629	2.2643	−34 2 33.69	8.939	2	2	Pr. Mo. + .003	0 .00
56	6¼	98.98	15 31.537	2.5063	−25 15 55.75	.828	2	2		
52	7	98.94	15 42.185	3.0693	− 0 9 48.98	.814	2	2		
65	5½	98.99	16 6.844	1.8915	−44 30 28.10	.782	2	2		
55	6¼	98.92	16 20.333	3.0658	− 0 19 56.97	.764	2	2	Pr. Mo. −s.002	−0″.17
68	6	98.91	17 22.260	2.4860	−25 57 49.32	.683	2	2	S. pr.	
72	5.3	98.94	18 42.040	2.9889	− 3 58 35.43	.577	3	3	Fund. 303.	
72		99.09	42.006		35.46		8	8		
81	6½	98.92	19 27.615	2.2005	−35 46 40.36	.514	2	2		
85	4	98.91	20 16.809	2.2474	−34 14 56.28	.453	2	2	Pr. Mo. +s.004	+0″.05
92	6¼	98.94	21 14.117	2.2228	−34 58 59.59	.376	2	2		
98	6½	98.92	22 10.493	1.8815	−44 23 24.79	.302	2	2		
115	6½	98.91	26 27.683	2.3453	−30 39 40.71	7.960	2	2		
110	5.3	98.95	26 45.638	3.0672	− 0 15 30.01	.936	4	4	Fund. 303.	
110		99.11	45.609		30.27		2	2		
118	6	98.94	27 1.817	2.1846	−35 52 12.79	.914	2	2		
124	6½	99.07	27 34.091	1.9892	−41 23 19.52	.870	2	2		
129	5¼	99.09	27 46.382	1.8355	−45 10 5.59	.854	2	2	Pr. Mo. −s.002	−0″.02
—	6	98.92	28 49 44	2.8893	− 8 27 57.87	.769	1	1	C. G. C. 5118.	
121	5	98.91	29 2.303	2.9225	− 6 56 54.83	.752	2	2		
126	5	98.94	29 22.573	2.8897	− 8 26 26.05	.725	2	2	N. fol.	
130	5	99.08	29 35.168	2.3612	−29 58 7.21	.707	2	2	Pr. Mo. −s.010	−0″.27
132	7	98.94	30 2.925	2.3977	−28 39 25.85	.670	2	2		
131	7¼	98.99	30 32.156	2.8880	− 8 29 53.16	.631	2	2		
133	3.3	98.91	31 19.325	2.9958	− 3 33 24.64	.567	2	2	Fund. B. J.	
144	4	99.11	31 39.733	2.3353	−30 46 1.23	.540	2	2	Pr. Mo. −s.006	0″.00
139	6¾	98.92	32 1.509	2.8839	− 8 39 48.93	.509	3	3	S. pr.	
141	7¼	98.94	32 21.404	2.8845	− 8 37 44.04	.483	3	2	N. fol.	
140	5	98.98	32 34.036	3.0148	− 2 40 23.85	.466	2	2		
142	7	99.11	32 41.392	3.0110	− 2 50 49.90	.456	2	2		
151	6	99.07	32 58.024	2.3291	−30 55 8.81	.433	2	2		
153	6½	99.08	33 11.878	2.3372	−30 37 55.20	.414	2	2		
150	4.0	99.11	33 35.979	2.7513	−14 29 56.71	.382	2	2	Fund. B. J.	
156	8	99.09	33 53.773	2.3074	−31 36 36.23	.359	2	2		
152	7	98.91	34 3.309	2.8885	− 8 25 22.51	.345	2	2		
160	6¼	99.11	34 3.848	1.9498	−42 4 28.85	.345	2	2		
154	5¾	98.92	34 13.698	2.8010	−12 19 16.00	.331	2	2		
155	5½	98.94	34 42.192	3.0456	− 1 14 56.40	.292	2	2		
157	5½	98.99	34 43.718	2.7495	−14 33 10.97	.291	2	2	Pr. Mo. +s.006	−0″.12
167	5¾	98.98	35 57.199	2.4993	−24 40 40.83	.190	2	2	Pr. Mo. −s.006	+0″.01
166	5.0	99.07	36 3.980	2.6218	−19 51 48.05	.181	2	2	Fund. 303.	
175	4	99.08	37 20.428	1.9444	−42 3 17.03	.077	2	2	Pr. Mo. −s.015	−0″.08
171	6½	98.91	38 9.071	2.5316	−23 22 3.90	010	2	2		
181	5	98.94	38 31.339	2.1166	−37 20 24.45	6.980	2	2	Pr. Mo. + .002	+0 .20
172	6¾	98.92	38 46.866	2.8746	− 8 58 52.48	.960	2	2	N. pr.	
173	6½	99.11	38 47.282	2.8745	− 8 58 59.10	.958	2	2	S. fol.	
174	7¼	98.99	39 6.327	2.9992	− 3 21 12.01	.932	2	2		
178	6	99.11	39 16.995	2.8809	− 8 41 25.07	.918	2	2		
182	5½	99.09	39 17.434	2.3203	−30 57 4.79	.917	2	2		

Star.	Mag.	Epoch.	R. A. 1900.0.	Precess.	Decl. 1900.0.	Precess.	No. Obs.		Notes.	
			h m s	s	° ′ ″	″				
P 192	6	1898.94	4 40 27.022	+1.9702	−41 15 3.11	+6.821	2	2		
188	7	98.91	40 28.941	2.4005	−28 8 1.90	.820	2	2		
183	3.6	98.98	40 30.064	2.9972	− 3 26 16.19	.817	2	2	Fund. B. J.	
186	5¼	98.92	40 46.085	2.5782	−21 27 59.97	.795	2	2		
196	6¼	99.07	42 7.588	2.2166	−34 11 13.11	.684	2	2		
197	6	98.99	42 26.271	2.3947	−28 16 6.12	.658	2	2		
202	6	99.08	42 32.803	2.0317	−39 32 13.13	.650	2	2		
198	5½	98.91	43 6.844	2.6840	−17 7 2.86	.603	2	2	Pr. Mo. +ˢ.009	+0″.18
210	6¼	98.92	43 55.511	2.3371	−30 11 59.72	.535	2	2		
206	5½	98.94	44 2.521	2.6981	−16 30 23.53	.526	2	2		
221	6¼	99.07	45 29.189	1.8428	−44 9 20.64	.405	2	2		
220	7½	98.98	45 31.163	2.1770	−35 15 39.65	.403	2	2	N. pr.	
215	6.0	99.08	45 41.128	2.6999	−16 23 26.90	.390	2	2	Fund. 303.	
223	7½	98.91	46 14.905	2.1756	−35 16 34.84	.343	2	2	S. fol.	
219	8	98.92	46 46.433	2.9495	− 5 32 41.35	.299	2	2		
230	6¼	98.94	47 1.073	1.9496	−41 29 36.92	.278	2	2		
237	5¾	99.09	47 49.900	2.1803	−35 4 26.95	.212	2	2		
224	7¼	98.99	47 50.925	2.9514	− 5 27 10.78	.209	2	2		
227	4	98.91	47 58.814	2.9476	− 5 37 11.28	.199	2	2		
238	6¼	98.92	49 27.858	2.9973	− 3 23 19.48	.076	2	2		
248	7½	98.91	51 9.678	2.9502	− 5 28 54.77	5.934	2	2		
250	5	98.94	51 28.558	2.9536	− 5 19 46.25	.907	2	2	S. pr. 4ˢ.5	
260	6	98.92	51 33.870	2.0086	−39 47 23.19	.900	2	2		
268	7¼	98.91	54 18.763	2.6571	−17 57 35.45	.670	2	2		
270	7	98.94	54 41.443	2.8349	−10 30 16.96	.638	2	2	S. pr. 7ˢ.8	
271	5	98.98	55 6.448	2.8369	−10 24 34.57	.603	2	2	Pr. Mo. +ˢ.001	−0″.12
272	6.0	98.99	55 16.941	2.7838	−12 41 5.35	.589	2	2	Fund. 303.	
280	5	99.07	56 35.400	2.9075	− 7 19 13.78	.478	2	2		
285	5½	98.91	57 5.267	2.5994	−20 11 50.71	.436	2	2		
289	5¼	98.94	58 5.831	2.4328	−26 25 0.84	.352	2	2	Pr. Mo. +ˢ.005	−0″.10
291	5¾	99.08	58 14.845	1.9967	−39 51 49.02	.339	2	2		
290	5¾	99.11	58 31.652	2.5272	−22 56 17.52	.315	2	2		
310	6	98.99	5 0 42.239	1.9137	−41 53 17.95	.131	2	2		
308	5	98.92	0 48.614	2.1467	−35 37 10.08	.122	2	2		
309	6¼	98.98	0 51.892	2.1390	−35 50 40.20	.118	2	2		
307	5¾	98.94	1 12.615	2.4340	−26 17 14.27	.088	2	2		
303	3.5	98.92	1 13.659	2.5370	−22 30 18.93	.087	2	2	Fund. B. J.	
303		99.09	13.644		18.30		2	2		
302	5¾	99.07	1 48.919	2.9643	− 4 47 20.95	.038	2	2		
306	7	99.08	1 59.547	2.9527	− 5 17 54.63	.023	2	2		
312	3.0	98.92	2 55.938	2.9545	− 5 12 56.23	4.942	2	2	Fund. B. J.	
312		99.11	55.982		56.07		2	2		
322	7	99.11	3 40.637	2.5944	−20 14 59.47	.879	2	2		
316	5¾	98.92	3 46.280	2.9687	− 4 35 9.69	.871	2	2		
323	4.0	99.02	4 21.610	2.8699	− 8 52 55.93	.821	3	3	Fund. B. J.	
2	7	99.07	5 11.382	2.9824	− 3 58 41.70	.751	2	2		
—	7	99.12	5 17.457	1.9296	−41 20 59.11	.742	2	2	Pr. Mo. −ˢ.013	+0″.32
3	7	99.08	5 31.143	2.8968	− 7 42 52.40	.722	2	2	Pr. Mo. − .003	−0 .16
4	7½	98.92	5 53.840	2.8018	−11 46 24.28	.691	2	2		
14	7¾	99.11	6 39.792	1.7961	−44 27 47.32	.626	2	2		
7	6	98.92	6 42.786	2.7969	−11 58 25.22	.621	2	2		
11	5	99.11	7 37.912	2.7962	−11 59 21.16	.543	2	2		
12	7¾	99.02	8 9.359	2.8854	− 8 11 1.49	.498	2	3		
16	4	99.07	8 26.333	2.6911	−16 19 25.36	.474	2	2		
17	5¼	99.08	8 36.760	2.7704	−13 3 35.01	.460	2	2	dup. 3″ S. pr.	
15	6½	98.92	8 44.761	2.8834	− 8 15 56.47	.448	2	2		
18	1	98.94	9 43.838	2.8820	− 8 19 1.58	.364	3	3	Fund. B. J.	
18		99.12	43.874		1.63		2	2		
30	6¾	98.98	10 13.452	2.1264	−35 56 24.35	.322	2	2		
24	7¾	98.92	10 17.560	2.9143	− 6 55 12.54	.316	2	2		

Star.	Mag.	Epoch.	R. A. 1900.0.	Precess.	Decl. 1900.0.	Precess.	No. Obs.		Notes.
			h m s	s	° ′ ″	″			
P 29	6¼	1899.09	5 10 36.752	+2.4051	−27 4 38.23	+4.289	2	2	
36	5¾	99.11	10 56.610	2.1204	−36 5 29.43	.257	2	2	
35	6	98.92	11 23.631	2.4053	−27 3 19.44	.222	2	2	
33	8	99.02	12 5.529	2.9111	− 7 2 45.84	.162	2	2	
44	6¼	98.94	12 11.591	2.1557	−35 2 19.09	.153	2	2	
47	6	99.07	12 43.698	2.2018	−33 38 50.13	.108	2	2	
40	4.0	98.92	12 44.978	2.9132	− 6 57 9.34	.105	2	2	Fund. B. J.
40		99.10	44.998		8.76		4	4	
51	5	99.09	13 52.631	2.1558	−34 59 34.47	.008	2	2	Pr. Mo. +ˢ.007 −0″.36
52	5	98.92	14 58.030	2.7633	−13 16 47.65	3.915	2	2	
54	5½	98.92	15 20.612	2.7839	−12 25 5.89	.883	2	2	
59	6	98.94	15 24.559	2.3908	−27 28 18.12	.878	2	2	Pr. Mo. −ˢ.002 0″.00
58	6	98.98	16 25.570	3.0609	− 0 30 56.18	.790	2	2	S. pr.
60	5	99.02	16 39.401	3.0617	− 0 28 51.71	.770	2	2	N. fol.
69	5½	99.07	16 44.572	2.1602	−34 47 56.71	.763	2	2	
74	6¼	98.92	17 39.604	2.1715	−34 26 35.36	.684	2	2	
70	6½	98.92	17 39.931	2.4636	−24 52 12.54	.684	2	2	N. pr. 4ˢ.2
77	5	98.94	18 55.597	2.7443	−14 1 15.78	.575	2	2	
75	5	99.08	19 7.733	2.8902	− 7 53 59.58	.558	2	2	
76	5	99.11	19 23.791	3.0500	− 0 59 14.63	.538	2	2	Pr. Mo. ˢ.000 +0″.13
81	3.3	99.10	19 26.893	3.0155	− 2 29 20.69	.529	2	2	Fund. B. J.
82	6½	99.07	19 38.887	3.0132	− 2 35 21.95	.512	2	2	
95	5¾	98.92	20 5.994	1.9769	−39 46 17.59	.473	2	2	
93	7	98.94	21 2.708	2.7632	−13 13 8.46	.393	2	2	
96	6½	98.98	21 27.612	2.7686	−12 59 33.81	.357	2	2	
108	6	99.12	21 56.849	1.7855	−44 18 53.60	.314	2	2	
97	6¾	99.02	21 57.349	3.0164	− 2 26 47.77	.314	3	3	
102	6	99.08	22 25.236	2.7928	−11 59 6.40	.274	2	2	
101	7¼	99.11	22 43.479	3.0214	− 2 13 46.43	.248	2	2	
104	7¾	98.92	22 54.888	2.8777	− 8 24 40.18	.230	2	2	
122	6	99.12	23 52.772	1.9238	−41 1 48.98	.148	2	2	Pr. Mo. −ˢ.002 +0″.10
109	6¾	98.92	23 54.820	2.8764	− 8 27 30.25	.145	2	2	
113	3.2	99.07	23 57.642	2.5701	−20 50 20.17	.140	2	2	Fund. B. J.
110	7¾	98.94	24 28.849	3.0435	− 1 16 4.67	.096	2	2	
111	6¾	99.09	24 35.826	3.0524	− 0 52 49.72	.086	2	2	
112	5	99.11	24 39.281	3.0457	− 1 10 15.61	.081	2	2	
124	5¾	99.02	24 48.587	2.0658	−37 18 50.10	.068	2	3	
133	5¾	98.98	26 50.741	2.5656	−20 56 15.07	2.892	2	2	
126	2.5	98.94	26 53.807	3.0642	− 0 22 22.91	.886	2	2	Fund. B .J.
130	5¾	98.92	27 5.566	2.9015	− 7 22 31.43	.870	2	2	
140	4½	99.08	27 39.711	2.1272	−35 32 37.97	.821	2	2	Pr. Mo. +ˢ.002 −0″.05
134	7	99.07	28 0.431	2.9653	− 4 38 16.39	.791	2	2	
139	3.0	98.92	28 19.098	2.6452	−17 53 37.53	.763	2	2	Fund. B. J.
157	5¾	99.11	28 45.606	1.7013	−45 59 54.95	.726	2	2	
144	6¾	98.92	29 27.911	2.9598	− 4 52 21.80	.664	2	2	
158	5¾	98.94	29 32.726	2.1378	−35 12 29.61	.653	2	2	
159	6½	99.09	29 39.530	2.1663	−34 22 22.69	.648	2	2	
147	5.1	98.99	30 21.718	2.9461	− 5 27 19.89	.586	2	2	Fund. B. J. N. pr.
149	5	99.12	30 27.118	2.9590	− 4 54 14.08	.578	2	2	
150	5.0	99.11	30 28.215	2.9455	− 5 28 54.15	.576	2	2	Fund. B. J. S. fol.
151	3.1	98.98	30 32.450	2.9340	− 5 58 31.36	.571	2	2	Fund. B. J.
154	5¾	98.92	30 43.461	2.9586	− 4 55 16.93	.554	2	2	Fol. 3d star.
—	7	98.92	30 59.921	2.9405	− 5 41 34.17	.531	1	1	N. prec.
160	2.0	99.08	31 8.311	3.0434	− 1 15 57.12	.519	2	2	Fund. B. J.
163	6½	98.97	31 20.872	2.9401	− 5 42 41.26	.500	3	2	S. fol.
169	5¾	99.07	32 15.648	2.3441	−28 46 13.40	.422	2	2	
167	6½	98.94	32 41.013	2.9567	− 4 59 39.84	.384	2	2	
177	6	99.09	33 19.504	2.3689	−27 55 46.44	.329	2	2	
172	3.7	98.92	33 43.485	3.0111	− 2 39 27.82	.294	2	2	Fund. B. J.
173	7¼	99.12	33 44.321	3.0111	− 2 39 26.33	.293	2	2	2d star.

Star.	Mag.	Epoch.	R. A. 1900.0.	Precess.	Decl. 1900.0.	Precess.	No. Obs.		Notes.
			h m s	s	° ′ ″	″			
P 181	6¼	1899.11	5 33 44.744	+2.3461	−28 41 6.23	+2.293	2	2	N. pr.
174	6¾	99.13	33 45.873	3.0112	− 2 39 6.75	.290	2	2	3d star.
183	5½	99.11	33 50.400	2.3441	−28 44 58.79	.284	2	2	S. fol.
176	5¼	99.02	34 2.781	2.9032	− 7 16 6.35	.267	2	2	
175	7	98.92	34 7.194	2.9507	− 5 15 4.08	.260	2	2	
178	5¾	98.94	34 32.153	2.9887	− 3 37 13.87	.224	2	2	
190	7¾	98.98	34 39.352	2.3395	−28 53 39.08	.213	2	2	
185	6¾	99.08	35 20.455	2.9919	− 3 28 50.67	.154	2	2	
193	8	98.92	35 23.722	2.3126	−29 45 59.19	.150	2	2	
193		1900.13	23.698		58.44		1	1	
195	6	1899.13	35 30.788	1.9269	−40 45 47.86	.140	2	2	
188	3	98.92	35 42.695	3.0264	− 1 59 43.89	.122	2	2	
196	3	99.09	36 1.670	2.1717	−34 7 38.97	.095	2	2	Pr. Mo. −ˢ.001 −0″.03
197	5½	99.07	36 7.896	2.2198	−32 40 54.72	.084	2	2	
205	6¼	98.94	37 47.419	2.1937	−33 26 59.13	1.941	2	2	
204	5¾	99.02	38 1.536	2.5237	−22 25 20.28	.920	2	2	
200	6¾	98.92	38 5.710	3.0342	− 1 39 33.97	.915	2	2	
207	6¼	98.92	38 22.888	2.2862	−30 35 1.36	.889	2	2	
211	5	98.98	38 40.044	2.1505	−34 42 59.83	.864	2	2	
217	6½	99.08	39 35.208	2.1924	−33 28 12.95	.784	2	2	
224	6¼	99.07	40 12.013	1.9768	−39 27 4.89	.730	2	2	
219	3.9	98.94	40 17.686	2.5216	−22 28 51.38	.721	2	2	Fund. B. J.
219		99.12	17.673		51.23		7	7	
231	6¼	99.11	40 50.860	1.6991	−45 52 43.69	.675	2	2	
238	6	98.92	42 16.860	2.2287	−32 20 39.91	.549	2	2	
230	3.6	98.92	42 25.430	2.7190	−14 51 32.70	.536	2	2	Fund. B. J.
230		99.11	25.446		32.62		2	2	
234	2.6	98.98	43 0.835	2.8447	− 9 42 18.70	.485	2	2	Fund. B. J.
241	6½	99.02	43 22.764	2.3884	−27 10 10.41	.454	2	2	
250	6	99.07	44 20.726	1.8876	−41 37 28.71	.370	2	2	
252	6¼	98.92	45 42.916	2.5063	−23 0 7.68	.249	2	2	
254	5¾	98.92	46 32.303	2.8960	− 7 32 41.27	.178	2	2	
261	4.0	99.08	47 1.253	2.5635	−20 53 14.08	.136	6	6	Fund. B. J.
263	8½	98.92	47 20.294	2.5640	−20 51 43.07	.108	2	2	
267	3½	98.94	47 26.110	2.1098	−35 48 21.86	.099	2	2	Pr. Mo. +ˢ.002 +0″.41
270	7	98.98	48 25.713	2.1051	−35 56 1.74	.013	2	2	
274	5¾	98.92	49 8.627	2.0425	−37 39 9.64	0.950	2	2	
278	6¼	99.09	49 26.816	2.0087	−38 32 51.69	.924	2	2	
276	5	99.08	49 29.059	2.1780	−33 49 25.04	.920	2	2	
286	5½	98.94	51 37.290	1.9528	−39 58 30.07	.733	2	2	
281	3.6	98.92	51 51.039	2.7350	−14 11 9.14	.713	2	2	Fund. B. J.
281		99.07	51.001		9.84		2	2	
290	5½	98.92	52 3.416	2.0610	−37 8 7.69	.695	2	2	
288	6¼	98.98	52 13.641	2.2525	−31 32 47.97	.681	2	2	
292	5¾	99.08	52 35.174	2.2573	−31 23 46.73	.649	2	2	
297	4½	98.94	53 59.501	2.1267	−35 17 37.79	.526	2	2	
294	6	98.92	54 15.729	2.8517	− 9 23 26.48	.503	2	2	
295	5¾	98.92	54 19.443	2.8475	− 9 33 53.98	.497	2	2	
313	5¾	99.08	55 39.622	1.7801	−44 2 32.15	.381	3	3	
315	4	98.98	56 5.168	1.8339	−42 49 14.69	.343	2	2	Pr. Mo. +ˢ.002 −0″.02
311	5½	98.92	57 8.135	2.8226	−10 35 57.06	.251	2	2	
312	7	98.92	57 20.533	2.9017	− 7 17 24.54	.233	2	2	
320	5¼	99.09	57 38.844	2.1741	−33 54 45.44	.207	2	2	
327	5½	98.92	59 13.743	2.4125	−26 17 2.42	.069	2	2	
331	5¼	98.96	6 0 31.370	2.6773	−16 28 39.07	−0.045	2	2	
330	6	99.08	0 43.721	2.8313	−10 14 9.60	.063	2	2	
346	6	99.11	1 35.763	1.7343	−45 2 11.00	.140	2	2	Pr. Mo. −ˢ.008 +0″.24
347	7	99.13	1 37.651	1.7271	−45 11 17.00	.141	2	1	
347		1900.13	37.675		17.75		1	1	
336	4¼	1899.02	1 37.718	2.7164	−14 55 33.87	.141	2	2	

Star.	Mag.	Epoch.	R. A. 1900.0.	Precess.	Decl. 1900.0.	Precess.	No. Obs.		Notes.
			h m s	s	° ′ ″	″			
P 348	6	1899.14	6 1 47.592	+1.7322	−45 4 42.89	−0.156	2	2	Pr. Mo. −ˢ.005 +0″.25
339	6	99.07	2 10.977	2.8090	−11 9 45.23	.191	2	2	
342	5½	98.98	2 21.864	2.5026	−23 5 57.60	.206	2	2	S. pr.
345	7	99.13	2 41.133	2.5031	−23 5 53.13	.235	2	2	N. fol.
349	5¾	98.96	3 20.621	2.6085	−19 9 14.52	.292	2	2	
352	5¾	99.09	3 27.551	2.1610	−34 17 57.63	.302	2	2	
6	6	99.11	3 35.601	1.8571	−42 17 11.58	.314	2	2	
4	7	99.10	3 50.659	2.0647	−37 1 22.21	.335	3	3	
5	7	99.17	3 53.219	2.0587	−37 11 12.20	.340	2	2	
9	5	99.11	4 5.935	2.0568	−37 14 21.43	.357	2	2	
11	6	99.13	4 7.822	1.7324	−45 4 45.91	.360	2	1	
11		1900.13	7.940		43.37		1	1	
12	5¼	1899.13	4 46.463	1.8635	−42 8 19.11	.417	2	2	
15	6¾	99.16	4 52.129	1.7495	−44 42 57.58	.426	2	2	
20	6	99.07	5 37.970	1.7668	−44 20 22.42	.493	2	2	
17	5½	99.02	6 35.898	2.3880	−27 7 55.06	.577	2	2	
28	5½	99.09	6 56.698	1.9381	−40 20 8.97	.607	2	2	Red.
26	7	99.11	7 28.826	2.3909	−27 2 5.46	.653	2	2	
34	6	99.14	7 47.420	1.7245	−45 15 35.25	.681	2	2	
36	6½	99.13	9 4.173	2.3494	−28 26 15.33	.793	2	2	
35	4.6	98.96	9 58.650	2.9266	− 6 14 38.42	.872	2	2	Fund. 303.
35		99.07	58.640		38.59		2	2	
44	7¼	99.02	10 53.594	2.9282	− 6 10 33.98	.952	2	2	
46	8¼	99.08	11 8.630	2.7720	−12 41 30.69	.974	2	2	N. pr.
48	8	99.15	11 15.792	2.7717	−12 42 19.93	.984	3	2	S. fol.
47	8	98.98	11 30.805	2.9288	− 6 9 8.50	1.006	2	2	
59	6¼	98.96	12 51.118	2.5152	−22 40 18.01	.124	2	2	Pr. Mo. +ˢ.013 −0″.27
56	6.7	99.13	12 53.051	2.8208	−10 41 17.06	.127	5	5	Fund. 303.
60	6¼	99.11	12 55.452	2.5243	−22 20 14.90	.130	2	2	
65	4	99.11	12 59.622	2.1345	−35 6 26.11	.135	2	2	Pr. Mo. −ˢ.001 +0″.07
68	5¾	99.13	13 17.360	1.9833	−39 13 40.97	.162	2	2	
70	5	99.13	13 37.059	2.0412	−37 42 9.47	.191	2	2	
71	5½	99.07	13 43.717	2.0593	−37 12 55.83	.199	2	2	
69	5¾	99.02	14 53.780	2.8904	− 7 46 50.78	.301	2	2	
72	8¼	98.96	15 3.206	2.7522	−13 30 46.96	.316	2	2	
73	6¾	98.98	15 17.915	2.8893	− 7 49 42.30	.338	2	2	
79	5¾	99.08	16 4.785	2.1613	−34 21 11.92	.405	2	2	
80	7¼	99.09	16 23.224	2.3037	−29 58 27.28	.432	2	2	
81	3	99.11	16 28.472	2.3023	−30 1 8.09	.439	2	2	Pr. Mo. ˢ.000 +0″.02
86	6¾	99.11	16 30.252	1.9759	−39 26 34.03	.442	2	2	S. pr. 2ˢ.6
76	8½	99.13	16 58.663	3.0266	− 1 58 54.56	.483	2	2	
88	5½	99.07	16 59.147	2.1701	−34 5 57.57	.485	2	2	
92	2.6	99.12	18 17.717	2.6422	−17 54 22.36	.599	9	9	Fund. B. J.
95	4	98.96	18 27.510	2.1946	−33 23 8.29	.613	2	2	
97	7¼	98.98	18 52.487	2.1802	−33 49 10.76	.649	2	2	
110	5½	99.07	20 32.912	2.0819	−36 39 18.95	.796	2	2	S. pr.
112	7	99.09	20 38.084	2.0822	−36 38 55.63	.803	2	2	N. fol.
117	6	99.05	21 29.790	1.9469	−40 13 39.94	.878	2	2	
111	6¼	99.14	22 3.674	2.9728	− 4 17 45.12	.926	2	2	
108	5½	99.08	22 8.825	3.0680	− 0 12 57.33	.934	2	2	
124	6¾	99.11	22 34.422	1.9197	−40 55 0.30	.971	2	2	
128	7¾	99.13	23 0.359	1.8927	−41 34 40.20	2.009	2	2	
116	5.0	98.98	23 1.230	2.9634	− 4 42 0.67	.010	2	2	Fund. B. J.
127	6½	99.13	23 22.188	2.2384	−32 6 11.48	.041	2	2	
118	6	99.11	23 41.027	3.0609	− 0 30 31.50	.068	2	2	
121	5½	99.14	23 58.051	2.9102	− 6 58 8.52	.093	2	2	N. pr.
122	6	98.96	23 58.532	2.9102	− 6 58 13.02	.093	2	2	S. fol. dup. m.
136	5	99.07	24 27.732	2.2254	−32 31 1.55	.135	2	2	Pr. Mo. −ˢ.005 +0″.02
139	7	99.11	24 36.383	1.9145	−41 4 16.11	.148	2	2	
138	5¾	99.09	24 56.016	2.2324	−32 18 24.55	.177	2	2	

Star.	Mag.	Epoch.	R. A. 1900.0.	Precess.	Decl. 1900.0.	Precess.	No. Obs.		Notes.
			h m s	s	° ′ ″	″			
P 145	6	1899.08	6 25 30.386	+1.9174	−41 0 36.65	−2.226	2	2	
148	5½	99.06	26 48.777	2.3757	−27 41 59.87	.339	2	2	
151	6	98.98	27 31.506	2.6417	−17 59 26.12	.399	2	2	
155	5	99.02	27 41.374	2.4999	−23 20 47.88	.416	2	2	
159	6	99.11	27 47.395	1.9254	−40 50 44.53	.425	2	2	
154	6	99.09	28 5.718	2.8126	−11 5 34.17	.451	2	2	
160	5¾	99.13	28 7.180	2.0777	−36 52 10.90	.454	2	2	
164	6½	98.96	28 54.405	2.2454	−31 57 21.49	.522	2	2	
166	5½	99.08	28 55.733	2.0507	−37 37 14.70	.523	2	2	
172	5	99.11	30 19.162	2.1044	−36 9 25.60	.645	2	2	
170	5.1	99.11	30 51.904	2.5136	−22 53 8.14	.692	2	2	Fund. B. J.
175	5¾	99.13	30 52.850	2.2243	−32 38 13.83	.694	2	2	
177	6¼	99.02	31 5.214	2.1816	−33 55 50.64	.711	2	2	
171	5¾	98.98	31 39.928	2.9539	−5 7 40.83	.762	2	2	
182	6	99.08	31 55.668	2.0860	−36 41 57.66	.783	2	2	
178	8	99.17	31 58.884	2.6278	−18 34 42.84	.789	3	2	S. pr.
179	5¾	98.96	32 0.135	2.6278	−18 34 39.71	.791	2	2	N. fol.
179		99.17	0.047		40.38		1	1	
180	4½	99.09	32 19.293	2.6126	−19 10 14.25	.818	2	2	
187	6¼	99.13	32 42.946	2.2522	−31 48 12.03	.853	2	2	
191	7¼	99.11	33 16.988	2.2417	−32 8 19.75	.900	2	2	Pr. Mo. (?)
189	5	99.09	33 29.495	2.6392	−18 9 3.22	.919	3	3	
195	5¼	99.13	33 38.079	2.0372	−38 3 44.76	.932	2	2	
199	6	99.14	33 40.915	1.9039	−41 28 21.54	.936	2	2	
197	5¾	98.96	33 45.958	2.0797	−36 54 17.46	.944	2	2	
198	5½	99.11	34 2.908	2.2384	−32 15 17.42	.967	2	2	
196	6½	99.02	34 39.481	2.6408	−18 5 48.53	3.020	2	2	
205	3	99.13	34 42.107	1.8357	−43 6 31.25	.024	2	2	Pr. Mo. −ˢ.001 −0″.01
206	7	98.98	35 15.068	2.0441	−37 54 21.30	.072	2	2	
213	6¼	98.96	36 32.504	2.0391	−38 3 55.87	.183	2	2	
214	6¾	99.08	37 18.549	2.2941	−30 33 4.54	.249	2	2	
216	6½	99.08	37 46.937	2.3852	−27 32 16.68	.291	2	2	Fol.
219	6½	99.09	37 58.648	1.9564	−40 15 17.58	.307	2	2	
223	6¾	99.02	38 53.345	2.0321	−38 18 4.42	.386	2	2	Dup. fol.
230	6¼	98.98	40 3.051	2.0032	−39 5 30.46	.486	2	2	
225	7¾	98.96	40 11.119	2.6797	−16 37 35.05	.498	2	2	
231	5¾	99.14	40 40.159	2.2831	−30 58 3.80	.539	3	3	
227	1	99.08	40 44.569	2.6809	−16 34 41.70	.545	2	2	Fund. B. J.
239	5½	99.13	41 38.431	2.2614	−31 40 47.19	.623	2	2	Pr. Mo. −ˢ.011 −0″.34
233	6¾	99.07	41 39.817	2.5767	−20 40 8.97	.624	2	2	S. pr.
238	6	99.11	41 42.484	2.2876	−30 50 37.90	.628	2	2	Dup. N. fol.
235	7	99.09	41 46.737	2.5812	−20 30 3.18	.634	2	2	
236	6½	99.14	41 49.513	2.5773	−20 38 53.13	.638	2	2	N. fol.
237	5	99.11	42 17.433	2.7373	−14 19 6.92	.679	2	2	
241	6½	98.96	42 44.503	2.5709	−20 54 25.62	.717	2	2	
245	6	99.02	42 46.392	2.0587	−37 40 6.23	.720	2	2	
242	7¼	99.13	42 48.905	2.5687	−20 59 35.75	.723	2	2	
253	5½	99.08	43 56.084	2.0541	−37 49 10.56	.820	2	2	
249	7	98.98	44 17.839	2.7390	−14 16 37.46	.850	2	2	
258	6¾	98.96	45 47.823	2.2404	−32 25 36.80	.979	2	2	S. pr.
259	3½	99.09	46 6.380	2.2417	−32 23 35.44	4.006	2	2	Pr. Mo. −ˢ.002 +0″.02
261	5¾	99.07	46 36.588	2.2676	−31 35 22.81	.049	2	2	S. pr.
262	7¾	99.11	46 39.671	2.2678	−31 35 5.44	.053	2	2	N. fol.
260	6½	99.02	46 45.887	2.6246	−18 53 44.33	.064	2	2	
267	5	99.08	47 14.209	2.1818	−34 14 57.75	.103	2	2	
268	7	99.11	47 27.188	2.1850	−34 9 29.72	.122	2	2	Pr. Mo. (?)
271	6	98.96	48 10.891	2.1191	−36 6 29.17	.185	2	2	
272	7½	98.98	49 5.633	2.6402	−18 19 20.64	.262	2	2	
275	5½	99.13	49 13.454	2.5947	−20 6 1.97	.273	2	2	
274	4.3	99.12	49 32.602	2.7973	−11 54 47.77	.300	4	4	Fund. B. J.

Star.	Mag.	Epoch.	R. A. 1900.0.	Precess.	Decl. 1900.0.	Precess.	No. Obs.		Notes.
			h m s	s	° ′ ″	″			
P 278	5½	1899.13	6 49 35.146	+2.3667	−28 24 11.69	−4.303	2	2	Pr. Mo. +s.025 −0″.48
277	7	99.11	49 40.997	2.4886	−24 6 21.29	.313	2	2	S. pr.
279	4	99.07	49 58.926	2.4900	−24 3 32.38	.337	2	2	N. fol.
282	6	99.02	50 43.679	2.5909	−20 16 38.46	.401	2	2	
287	5.6	98.96	51 17.295	2.5981	−20 0 31.99	.450	2	2	Fund. 303.
291	5½	99.14	51 17.752	1.8892	−42 14 20.95	.450	3	3	Red.
286	5	99.08	51 31.708	2.7499	−13 54 50.33	.469	2	2	3″ dup. S. star.
289	5	99.11	51 40.629	2.6762	−16 55 28.27	.482	2	2	
290	6	99.14	52 35.524	2.6756	−16 57 58.42	.560	3	2	
—	7½	99.12	52 58.444	2.6758	−16 57 43.68	.593	1	1	N. fol.
300	5¾	98.98	53 26.301	2.4800	−24 30 0.70	.633	2	2	Pr. Mo. (?)
303	5.9	99.08	54 30.008	2.4592	−25 16 42.25	.724	6	6	Fund. 303.
304	1.6	99.12	54 41.706	2 3576	−28 50 9.42	.739	6	6	Fund. B. J.
306	5½	98.96	54 45.436	2.1974	−33 58 32.59	.745	2	2	
307	7	99.08	55 9.024	2.3583	−28 49 30.01	.779	2	2	
314	6¼	99.09	55 47.346	1.7465	−45 37 48.91	.833	2	2	
320	3½	99.07	57 44.114	2.3904	−27 47 29.38	.998	2	2	
315	5.4	98.98	57 56.885	2.9803	− 4 5 38.74	5.016	2	2	Fund. 303.
315		99.08	56.893		38.35		4	4	
318	7	98.96	58 24.870	3.0080	− 2 52 43.83	.056	2	2	
319	6¾	99.10	58 28.936	2.9796	− 4 7 10.86	.062	2	2	
323	4	99.11	58 50.975	2.5055	−23 41 13.90	.093	2	2	Pr. Mo. −s.001 0″.00
327	6¼	99.09	59 9.920	1.8565	−43 15 29.64	.119	2	2	
325	4.3	99.08	59 14.051	2.7147	−15 29 7.60	.125	2	2	Fund. B. J.
335	5¾	99.07	7 0 52.568	1.9035	−42 11 23.59	.263	2	2	
336	5½	99.11	0 53.347	1.8499	−43 28 10.99	.264	2	2	Pr. Mo. −s.012 +0″.36
337	7¼	99.13	0 54.846	1.8498	−43 28 19.87	.266	2	2	S. fol. − .012 (?) +0 .36
328	7¼	98.96	0 59.740	2.7339	−14 43 11.59	.273	2	2	
344	7	98.98	2 47.160	1.9068	−42 10 27.74	.425	2	2	
6	5¾	99.05	3 50.629	1.9658	−40 44 12.45	.513	2	2	
2	2.0	99.10	4 19.515	2.4397	−26 14 3.92	.554	6	6	Fund. B. J.
4	5.8	99.11	5 15.660	2.9812	− 4 4 51.35	.632	6	6	Fund. 303.
18	5	99.09	5 29.657	2.0156	−39 29 42.77	.652	2	2	
13	5¾	99.07	5 35.761	2.4728	−25 4 10.10	.660	2	2	S. pr.
14	7¾	99.11	5 37.751	2.4735	−25 2 47.74	.663	2	2	N. fol.
15	4	98.96	6 45.445	3.0654	− 0 19 37.20	.758	2	2	
19	6½	98.98	7 14.845	2.9545	− 5 16 41.46	.800	2	2	
31	6	99.02	8 6.749	2.4555	−25 46 30.76	.871	2	2	
27	5¾	99.11	8 25.018	2.8225	− 11 4 56.31	.898	2	2	
41	5¾	99.09	8 57.101	1.9889	−40 19 48.04	.942	3	3	
44	6½	98.96	9 56.363	2.3092	−30 54 42.30	6.024	2	2	
45	5¼	99.08	10 10.644	2.4461	−26 10 48.47	.044	2	2	
54	5¼	99.11	10 13.848	1.7978	−45 0 33.31	.049	2	2	
55	4½	99.13	10 29.170	1.8216	−44 28 38.69	.070	2	2	Red. Pr. Mo. +s.009 +0″.35
51	4¼	99.09	10 45.239	2.4350	−26 35 57.48	.092	2	2	
46	5¾	98.98	10 59.284	2.8389	−10 24 30.59	.112	2	2	
58	6	99.11	11 41.446	1.9572	−41 15 6.53	.170	2	2	
59	5	99.02	12 34.562	2.4056	−27 42 15.79	.244	2	2	
56	6	98.96	12 39.131	2.9280	− 6 30 4.04	.251	2	2	
65	6	99.07	13 4.343	2.0759	−38 8 27.50	.285	2	2	
66	5½	99.08	13 15.788	2.1366	−36 24 50.82	.300	2	2	
68	3	99.11	13 36.716	2.1197	−36 55 4.63	.329	2	2	Pr. Mo. −s.002 +0″.01
71	5.3	98.96	14 30.525	2.4987	−24 22 34.30	.404	2	2	Fund. 303.
72	5	99.09	14 33.741	2.4882	−24 46 19.37	.408	2	2	
—	7½	99.12	14 39.652	2.4884	−24 45 57.43	.418	1	1	N. fol.
74	5	98.98	14 45.016	2.1339	−36 33 7.25	.424	2	2	N. pr.
82	5¾	99.11	14 58.516	1.8586	−43 48 16.19	.443	2	2	
73	6¼	99.15	15 3.946	2.4886	−24 46 19.61	.451	2	2	
78	5½	99.14	15 4.832	2.1341	−36 33 35.38	.452	2	2	S. fol.
80	6	99.13	15 8.917	2.0469	−39 1 38.64	.458	2	2	

Star.	Mag.	Epoch.	R. A. 1900.0.	Precess.	Decl. 1900.0.	Precess.	No. Obs.		Notes.
			h m s	s	° ′ ″	″			
P 88	5½	1899.02	7 16 57.975	+2.4652	−25 42 13.59	−6.608	2	2	
85	6.6	99.07	17 14.292	2.8776	− 8 47 24.68	.630	2	2	Fund. 303.
86	6	99.11	17 31.125	2.9448	− 5 47 31.88	.654	2	2	
93	7¾	98.98	18 21.739	2.2906	−31 50 31.41	.722	2	2	N. pr.
96	6¼	99.12	18 46.681	2.2907	−31 51 15.44	.757	3	2	S. fol.
99	5½	99.09	19 11.322	2.2949	−31 43 51.81	.791	2	2	
—	7½	99.11	19 26.283	2.2915	−31 51 12.53	.812	1	1	
102	5	99.13	19 43.247	2.2872	−32 0 29.44	.835	2	2	
103	6½	99.13	19 55.226	2.3736	−29 5 41.71	.851	2	2	N. pr.
104	3	99.02	20 8.382	2.3734	−29 6 28.46	.869	2	2	S. fol.
100	5½	99.07	20 8.984	2.7125	−16 0 17.46	.870	2	2	
108	5½	98.96	20 53.961	2.3013	−31 36 43.89	.932	2	2	
113	6	99.08	21 52.675	2.3040	−31 32 23.63	7.012	2	2	
119	5¾	99.09	22 59.417	2.2314	−33 56 22.61	.103	2	2	
116	6.1	98.98	23 9.615	2.8218	−11 21 14.03	.116	2	2	Fund. 303.
116		99.13	9.577		13.85		4	4	
121	7	98.96	23 33.005	2.2402	−33 41 11.22	.149	2	2	
122	6	99.02	24 0.990	2.3823	−28 57 7.16	.187	3	2	
120	5¾	99.07	24 34.152	2.9119	− 7 20 54.52	.232	2	2	Pr. Mo. +ˢ.007 +0″.13
123	6	99.13	24 42.224	2.3842	−28 54 45.36	.243	2	2	
124	6¼	99.08	25 0.755	2.3050	−31 38 33.37	.268	2	2	S. prec. close pair.
125	6	99.11	25 13.293	2.3169	−31 14 59.79	.285	2	2	
130	5¾	99.11	25 38.056	2.0790	−38 36 20.49	.319	2	2	
135	4	99.09	26 3.551	1.9089	−43 5 57.07	.353	2	2	Pr. Mo. −ˢ.002 +0″.18
137	5	98.96	26 49.273	2.3337	−30 45 6.47	.416	2	2	
148	7	98.96	29 51.980	2.4061	−28 21 3.23	.661	2	2	
147	6¼	98.98	30 5.021	2.5421	−23 15 20.75	.680	2	2	N. pr.
149	6¼	99.11	30 5.669	2.5420	−23 15 24.13	.682	2	2	S. fol.
157	5½	99.10	30 13.932	2.1718	−36 7 15.00	.692	2	2	
154	6½	99.02	30 21.657	2.4735	−25 53 51.20	.702	2	2	
163	5¼	99.08	31 22.042	2.4136	−28 8 53.56	.784	2	2	
165	6½	98.96	31 40.179	2.5417	−23 19 37.23	.808	2	2	
162	5.3	99.12	32 18.373	2.9892	− 3 53 15.36	.859	8	8	Fund. B. J.
172	5¼	99.02	33 40.098	2.2219	−34 44 37.21	.969	2	2	Pr. Mo. −ˢ.002 +0″.01
173	5½	98.98	34 8.202	2.4976	−25 8 16.13	8.006	2	2	
175	6¼	98.96	34 43.454	2.4604	−26 34 26.03	.053	2	2	N. pr.
177	6	99.13	34 43.977	2.4603	−26 34 35.32	.054	2	2	S. fol.
180	6¼	99.07	35 6.503	2.1751	−36 16 7.19	.084	2	2	
185	5	99.09	35 55.937	2.1158	−38 4 42.45	.151	2	2	S. pr.
186	5¾	99.11	36 11.804	2.1220	−37 54 33.28	.170	2	2	
188	6	99.13	36 16.196	2.1181	−38 1 47.50	.177	2	2	S. fol.
190	(6.7)	99.11	36 23.873	2.1415	−37 20 53.12	.188	2	2	
181	4.3	99.15	36 28.147	2.8725	− 9 19 3.89	.193	6	6	Fund. 303.
193	5½	98.96	37 44.838	2.1116	−38 17 58.76	.296	2	2	
197	7	99.02	38 26.964	2.1131	−38 17 35.68	.351	2	2	
195	6	98.98	38 40.396	2.4762	−26 6 48.56	.369	2	2	
200	5	99.07	39 30.127	2.4232	−28 10 23.28	.435	2	2	
203	5¾	99.08	39 32.419	2.1967	−35 48 44.05	.437	2	2	
201	5	99.09	39 47.659	2.4085	−28 42 56.77	.457	2	2	Pr. Mo. −ˢ.001 0″.00
211	5¼	99.16	39 51.526	1.8644	−44 54 12.31	.463	2	2	Pr. Mo. − .003 −0 .55
206	7¼	99.11	40 9.257	2.1934	−35 58 43.72	.486	2	2	
208	6¼	99.13	40 10.384	2.1277	−37 57 48.15	.488	2	2	
213	5¼	99.14	40 17.550	2.0316	−40 41 23.02	.497	2	2	
209	7½	99.13	40 18.288	2.1443	−37 28 50.85	.498	2	2	
212	5¾	99.18	40 30.427	2.1990	−35 49 28.32	.514	2	2	
202	7¼	98.96	40 47.312	2.9576	− 5 26 9.41	.536	2	2	
204	6½	99.19	40 52.731	2.7612	−14 26 35.93	.543	2	2	N. pr.
205	6	99.11	40 53.154	2.7612	−14 26 51.58	.544	2	2	S. fol.
210	5.0	99.02	41 20.561	2.7643	−14 19 13.84	.580	2	2	Fund. 303.
214	4	99.16	41 41.491	2.1387	−37 43 34.37	.608	2	2	Pr. Mo. −ˢ.004 0″.00

Star.	Mag.	Epoch.	R. A. 1900.0.	Precess.	Decl. 1900.0.	Precess.	No. Obs.		Notes.
			h m s	s	° ′ ″	″			
P 218	6	1898.98	7 42 36.480	+2.1417	−37 41 21.75	−8.680	2	2	
217	6½	98.96	43 15.727	2.8181	−11 56 48.85	.731	2	2	
219	7¼	99.13	43 48.931	2.8179	−11 58 10.37	.776	2	2	
225	5½	99.08	43 52.671	2.1248	−38 15 50.24	.780	2	2	
220	5¼	99.07	43 55.753	2.4947	−25 41 20.44	.784	2	2	
235	5½	99.21	44 30.184	1.8141	−46 21 37.61	.830	3	3	
226	7¾	99.09	44 40.589	2.5205	−24 43 1.33	.843	2	2	Pr. Mo. +s.016 −0″.28
231	6¾	99.11	44 47.778	2.3415	−31 22 5.23	.852	2	2	
230	3½	99.13	45 5.300	2.5237	−24 36 31.78	.875	2	2	Pr. Mo. − .002 +0 .02
229	5¼	99.11	45 10.163	2.7069	−16 58 24.40	.882	2	2	Pr. Mo. + .005 −0 .11
228	6	99.14	45 22.254	2.8845	− 8 55 51.16	.898	2	2	
227	7	99.18	45 30.666	3.0037	− 3 20 40.82	.908	2	2	
237	6	98.96	45 31.195	2.2344	−34 59 30.96	.909	2	2	
244	5	99.16	46 11.593	1.8291	−46 7 19.44	.962	2	2	Pr. Mo. −s.002 −0″.02
239	6	99.08	47 0.305	2.8067	−12 33 49.09	9.025	2	2	
240	6.0	99.15	47 8.451	2.7833	−13 37 56.92	.036	3	3	Fund. 303.
241	7	99.13	47 17.325	2.6828	−18 6 5.20	.048	2	2	
243	5¾	99.09	47 42.724	2.7625	−14 35 21.19	.080	2	2	
245	6¼	99.19	47 49.623	2.7844	−13 36 10.65	.089	2	2	Pr. Mo. +s.005 −0″.07
242	6	99.11	47 51.670	2.9649	− 5 10 10.41	.092	2	2	
250	5½	98.96	48 31.655	2.2565	−34 27 13.86	.145	2	2	Pr. Mo. −s.017 +0″.22
253	5	99.14	48 46.774	2.0637	−40 19 6.30	.163	2	2	Red. Pr. Mo. −s.002 +0″.01
254	5	99.11	49 6.262	2.1241	−38 36 15.27	.189	2	2	
256	5½	99.18	49 22.944	2.2067	−36 6 15.14	.211	2	2	
247	6¼	99.16	49 31.338	3.0202	− 2 32 4.14	.221	2	2	
259	5¾	99.08	50 28.612	2.2242	−35 36 55.22	.295	2	2	
262	6	98.96	50 53.308	2.2569	−34 34 59.68	.329	2	2	
264	7¼	99.02	52 12.562	2.5783	−22 44 15.96	.429	2	2	
274	6¼	99.15	52 31.644	1.9509	−43 34 45.50	.454	2	2	
266	4.8	98.98	52 33.553	2.5817	−22 36 47.25	.456	2	2	Fund. 303.
266		99.13	33.577		47.48		6	6	Fund. 303.
268	7¾	99.09	53 30.244	3.0035	− 3 22 4.16	.530	2	2	
277	5½	99.11	53 40.963	2.3921	−30 3 56.13	.544	2	2	
283	5¼	99.13	54 4.055	1.9447	−43 50 28.04	.573	2	2	
288	5½	99.16	54 43.273	1.8872	−45 18 31.88	.623	2	2	
278	5.4	98.96	54 44.409	3.0029	− 3 24 24.43	.624	2	2	Fund. 303.
278		99.14	44.399		24.49		4	4	
281	5½	99.08	54 48.416	2.5741	−23 2 19.35	.629	2	2	
287	7¼	99.02	55 45.894	2.5743	−23 4 39.13	.704	2	2	
292	(5.9)	98.96	55 56.590	2.1250	−39 1 19.24	.716	2	2	Pr. M. (?)
284	5¼	98.98	56 8.067	3.0500	− 1 6 52.96	.732	2	2	
301	6	99.02	59 10.001	2.3426	−32 10 59.27	.963	2	2	
300	6¾	98.96	59 58.224	3.0077	− 3 12 44.65	10.023	2	2	
302	7¾	98.98	8 0 1.509	2.6629	−19 29 35.28	.027	2	2	9 Mag. fol. 7s.9
306	3	99.07	0 4.182	2.1110	−39 43 17.75	.031	2	2	Pr. Mo. −s.003 +0″.01
303	6	99.09	0 15.108	2.6643	−19 26 41.28	.045	2	2	N. fol.
305	5½	99.11	0 22.343	2.3389	−32 23 31.15	.053	2	2	
320	3.0	99.16	3 17.107	2.5612	−24 0 57.91	.274	10	10	Fund. B. J.
318	6¾	99.15	3 21.909	2.8032	−13 13 0.76	.280	2	2	
316	4¾	99.13	3 34.057	3.0188	− 2 41 33.23	.296	2	2	
1	5¼	99.14	4 33.768	2.6798	−18 57 7.86	.369	2	2	
2	7	99.19	5 12.294	2.9436	− 6 26 59.89	.417	2	2	
9	6	99.16	6 1.759	2.7990	−13 30 18.44	.480	2	2	Pr. Mo. −s.016 +0″.05
16	6	99.26	6 24.278	2.0350	−42 20 45.09	.507	2	2	
12	7¼	99.13	6 34.671	2.6880	−18 40 38.59	.519	2	2	
11	5½	99.18	6 34.786	2.8177	−12 37 48.63	.520	2	2	
17	6	99.26	7 19.977	2.2170	−36 59 41.58	.576	2	2	
21	5	99.26	7 47.162	2.1436	−39 19 14.08	.610	2	2	
22	5¼	99.14	8 3.233	2.0272	−42 41 21.78	.630	2	2	
18	6.0	99.19	8 44.235	2.7592	−15 29 12.89	.680	2	2	Fund. B. J.

Star.	Mag.	Epoch.	R. A. 1900.0.	Precess.	Decl. 1900.0.	Precess.	No. Obs.		Notes.
			h m s	s	° ′ ″	″			
P 27	6½	1899.18	8 8 44.734	+2.0140	−43 6 2.79	−10.680	2	2	
29	6	99.26	8 51.309	1.8873	−46 20 41.52	.689	2	2	
25	7½	99.16	9 18.017	2.3708	−31 51 19.07	.722	2	2	
31	5	99.19	9 43.007	2.2650	−35 35 50.45	.753	2	2	
32	5¾	99.13	10 13.795	2.3731	−31 50 14.07	.790	2	2	
35	5½	99.25	10 29.850	2.1266	−40 2 32.20	.810	3	3	
38	6	99.14	11 11.186	1.9280	−45 31 49.00	.861	2	2	
39	6¼	99.15	12 48.004	2.7525	−15 58 31.32	.980	2	2	
45	6¾	99.13	13 58.573	2.7895	−14 15 15.46	11.065	2	2	
47	4½	99.14	14 48.773	2.2543	−36 20 58.32	.127	2	2	Pr. Mo. −ˢ.014 +0″.09
56	5	99.15	17 26.674	2.3632	−32 44 10.81	.317	2	2	
55	6	99.13	18 4.816	2.8238	−12 43 59.98	.364	2	2	
60	5¾	99.14	18 36.356	2.5357	−26 1 39.58	.401	2	2	
63	5¾	99.16	19 35.863	3.0071	− 3 25 37.10	.473	2	2	Pr. Mo. −ˢ.015 −0″.05
69	3.6	99.15	20 39.834	3.0044	− 3 34 48.31	.549	2	2	Fund. B. J.
72	5½	99.18	20 44.679	2.5926	−23 43 18.22	.554	2	2	S. pr.
74	7¾	99.19	20 47.649	2.5927	−23 43 16.34	.557	2	2	N. fol.
73	6	99.13	21 27.398	3.0030	− 3 39 29.99	.605	2	2	
82	5½	99.14	22 22.072	2.0999	−41 49 33.86	.670	2	2	
81	6¼	99.16	23 26.288	3.0314	− 2 11 8.17	.746	2	2	
83	6¾	99.15	24 24.764	3.0609	− 0 37 35.53	.815	2	2	
99	6	99.19	26 29.673	1.9618	−45 59 49.64	.961	2	2	
94	6½	99.14	26 54.029	2.7003	−19 10 4.37	.991	2	2	
95	6.0	99.15	27 1.286	2.6990	−19 14 22.89	.999	4	4	Fund. 303.
97	7	99.16	27 36.829	3.0197	− 2 50 23.51	12.041	2	2	
100	7¼	99.15	28 29.585	3.0237	− 2 38 8.57	.101	2	2	
109	6.1	99.16	30 35.407	2.9308	− 7 38 16.49	.247	4	4	Fund. 303.
125	6½	99.15	32 47.856	2.5588	−26 4 2.47	.399	2	2	
133	6	99.18	33 35.888	2.5639	−25 54 16.85	.455	2	2	
139	5	99.19	34 7.645	2.1098	−42 38 22.85	.491	2	2	Pr. Mo. −ˢ.002 0″.00
138	6.0	99.16	35 17.179	2.8490	−12 7 18.24	.570	2	2	Fund. 303.
140	5½	99.14	35 33.478	2.4911	−29 12 17.84	.589	2	2	
145	4½	99.15	36 11.324	2.3470	−34 57 12.35	.632	2	2	Pr. Mo. ˢ.000 −0″.02
148	6	99.18	36 39.023	2.2058	−39 54 32.44	.663	2	2	Dup. 9½ 3″ N. f.
146	5¼	99.13	37 4.945	2.7841	−15 35 2.19	.693	2	2	Pr. Mo. ˢ.000 −0″.13
155	5	99.19	37 18.385	1.9909	−46 17 35.84	.707	2	2	
151	8	99.25	38 41.649	2.9489	− 6 51 34.60	.801	3	3	N. pr.
152	5½	99.16	38 45.748	2.9487	− 6 52 25.21	.805	2	2	S. fol.
162	4	99.14	39 34.437	2.4111	−32 49 33.48	.860	2	2	Pr. Mo. −ˢ.002 +0″.02
159	8	99.26	40 17.361	3.0328	− 2 14 16.29	.908	2	2	S. pr.
160	6¾	99.15	40 17.723	3.0328	− 2 14 14.94	.908	2	2	N. fol.
168	5	99.18	40 49.676	2.1441	−42 17 12.65	.944	2	2	S. pr.
169	7½	99.19	41 10.270	2.1466	−42 15 48.92	.967	2	2	N. fol.
166	5¼	99.13	41 39.046	2.8343	−13 10 55.17	13.000	2	2	
167	5.3	99.23	42 10.867	3.0456	− 1 31 49.98	.035	3	3	Fund. 303.
176	5	99.14	42 38.326	2.0344	−45 40 35.38	.065	2	2	Pr. Mo. −ˢ.002 +0″.01
177	5½	99.15	44 20.253	3.0187	− 3 4 18.24	.177	2	2	
187	6½	99.26	44 32.486	2.1632	−42 5 39.57	.191	2	2	
190	5½	99.13	45 47.719	2.4367	−32 24 24.98	.273	2	2	
188	6	99.16	45 50.749	2.5153	−29 5 26.79	.276	2	2	
194	5½	99.14	45 55.874	2.2339	−39 56 52.95	.281	2	2	
193	5¼	99.19	46 17.253	2.5556	−27 20 19.87	.305	2	2	Pr. Mo. −ˢ.012 +0″.08
198	5½	99.26	46 20.165	2.0750	−44 56 7.64	.309	2	2	
189	6.0	99.18	46 39.597	2.9536	− 6 48 8.91	.329	2	2	Fund. 303.
205	6	99.26	47 9.977	2.0350	−46 9 16.41	.363	2	2	
214	6¾	99.13	50 35.532	2 9417	− 7 35 19.56	.585	2	2	Dup. S. star.
215	7	99.16	50 35.543	2.9417	− 7 35 15.26	.585	2	2	N. star.
220	5¼	99.14	51 14.199	2.5666	−27 17 49.26	.626	2	2	
227	6.4	99.23	54 2.317	2.7992	−15 45 4.13	.805	11	11	Fund. 303.
228	7	99.13	54 54.203	3.0363	− 2 9 30.45	.860	2	2	

Star.	Mag.	Epoch.	R. A. 1900.0.	Precess.	Decl. 1900.0.	Precess.	No. Obs.		Notes.
			h m s	s	° ′ ″	″			
P 235	7	1899.14	8 56 12.254	+3.0363	− 2 10 5.93	−13.942	2	2	Pr. Mo. −ˢ.011 −0″.08
242	5	99.18	56 21.431	2.2420	−40 51 51.53	.951	2	2	
237	7	99.16	56 32.942	3.0546	− 1 5 1.55	.964	2	2	
238	7	99.15	57 3.749	2.9385	− 7 58 46.25	.996	2	2	
246	7	99.13	58 53.080	2.8352	−14 2 30.53	14.110	2	2	
260	6½	99.16	9 2 57.911	3.0390	− 2 4 19.89	.360	2	2	
266	8	99.26	2 58.236	2.1998	−43 5 42.74	.361	2	2	Pr. Mo. (?)
265	5	99.14	3 39.491	2.6300	−25 27 18.28	.403	2	2	
264	5.9	99.21	3 48.491	2.9390	− 8 11 6.26	.412	4	4	Fund. 303.
268	6½	99.19	4 15.803	2.6316	−25 26 4.64	.440	2	2	Pr. Mo. (?)
1	3	99.26	4 19.060	2.2071	−43 1 44.62	.443	2	2	Pr. Mo. −ˢ.005 +0″.01
267	5¾	99.18	4 42.132	2.9363	− 8 22 53.80	.467	2	2	
5	7	99.27	5 22.272	2.6346	−25 23 48.51	.507	2	2	
7	5¾	99.28	5 42.080	2.5416	−29 57 25.24	.527	2	2	
9	6¾	99.16	6 54.763	2.9672	− 6 34 12.12	.599	2	2	
13	6.4	99.29	7 23.891	2.7519	−19 20 20.27	.629	2	2	Fund. 303.
17	6	99.26	7 26.733	2.1757	−44 27 31.56	.631	2	2	
10	7	99.19	7 28.656	2.9683	− 6 31 11.93	.633	2	2	
11	6	99.26	7 29.783	2.9654	− 6 41 58.59	.634	2	2	
16	6¾	99.18	8 14.695	2.8286	−15 0 29.60	.679	2	2	
21	6½	99.27	9 18.912	2.8421	−14 16 51.00	.743	2	2	
26	6½	99.28	9 29.570	2.3602	−38 12 11.25	.753	2	2	
22	7¼	99.29	9 43.724	3.0075	− 4 7 34.71	.767	2	2	
24	6½	99.16	9 59.186	2.9403	− 8 20 35.48	.783	2	2	
27	7	99.19	10 39.157	2.9410	− 8 19 36.41	.822	2	2	
33	5½	99.26	10 40.550	2.2387	−42 48 47.61	.823	2	2	Pr. Mo. (?)
34	6	99.26	10 57.851	2.3906	−37 11 12.36	.840	2	2	
40	5	99.14	11 40.300	2.3689	−38 9 11.78	.882	2	2	Pr. Mo. (?)
30	5¾	99.18	11 43.734	2.9796	− 5 56 9.07	.885	2	2	
41	5¼	99.27	11 44.956	2.3979	−36 59 45.71	.887	2	2	
32	6	99.19	11 47.343	2.9417	− 8 19 38.51	.889	2	2	
44	7	99.28	11 52.235	2.3930	−37 12 45.24	.894	2	2	
39	6	99.26	12 23.096	2.8475	−14 9 20.21	.924	2	2	
43	7¼	99.29	12 40.416	2.8906	−11 32 31.38	.941	2	2	
52	5¾	99.16	14 49.907	2.8296	−15 24 39.93	15.065	2	2	Pr. Mo. (?)
53	5¾	99.18	14 57.388	2.8925	−11 33 10.05	.073	2	2	
56	7	99.27	15 28.104	2.9305	− 9 11 9.85	.103	2	2	S. pr.
57	5¼	99.14	15 36.037	2.9315	− 9 7 52.15	.111	2	2	N. fol.
69	6¼	99.26	16 11.574	2.8348	−15 11 25.34	.144	2	2	Pr. Mo. +ˢ.006 −0″.12
61	7	99.28	16 30.305	2.5401	−31 20 9.34	.162	2	2	S. star 3″ dup.
63	5.3	99.27	17 3.960	2.6559	−25 32 23.36	.195	4	4	Fund. 303.
68	6¼	99.16	17 58.302	2.9288	− 9 24 39.91	.246	2	2	
73	6½	99.14	18 39.954	2.7473	−20 36 36.15	.286	2	2	
75	5	99.27	18 52.498	2.6053	−28 24 21.79	.297	2	2	Pr. Mo. (?)
71	6¾	99.18	18 55.245	2.9981	− 4 55 57.86	.300	2	2	
72	6½	99.19	19 1.289	2.9966	− 5 2 15.23	.305	2	2	
77	6	99.26	20 24.079	3.0024	− 4 41 9.43	.383	2	2	
80	7¼	99.28	20 29.080	2.9830	− 5 58 22.71	.388	2	2	
85	6	99.16	21 16.814	3.0574	− 1 1 52.80	.432	2	2	
87	6¼	99.19	22 20.654	2.9415	− 8 47 22.81	.491	2	2	
93	6½	99.26	22 32.149	2.3595	−40 4 6.31	.502	2	2	
89	2.0	99.14	22 40.407	2.9503	− 8 13 30.02	.510	2	2	Fund. B. J.
94	5	99.26	24 4.356	3.0385	− 2 19 53.91	.587	2	2	S. p. Pr. Mo. +ˢ.009 0″.00
95	7¼	99.28	24 4.598	3.0387	− 2 18 48.76	.587	2	2	N. f. Pr. Mo. + .013 0 .00
96	6½	99.16	24 20.310	3.0468	− 1 46 4.85	.602	2	2	
103	5	99.27	25 7.073	2.4759	−35 30 49.41	.645	2	2	Pr. Mo. −ˢ.004 −0″.02
101	6¾	99.29	25 14.656	2.6623	−26 9 19.54	.651	2	2	S. pr.
105	5½	99.19	25 28.159	2.6629	−26 9 5.08	.664	2	2	N. fol.
102	6¾	99.26	25 55.603	2.9966	− 5 13 22.74	.688	2	2	
113	6¼	99.19	26 29.077	2.5650	−31 26 56.03	.718	3	2	9″ N. fol.

Star.	Mag.	Epoch.	R. A. 1900.0.	Precess.	Decl. 1900.0.	Precess.	No. Obs.		Notes.
			h m s	s	° ′ ″	″			
P 116	4½	1899.27	9 26 45.682	+2.3766	−40 1 44.18	−15.735	2	2	Pr. Mo. −ˢ.019 +0″.08
110	5.0	99.18	26 53.026	3.0620	− 0 44 37.10	.741	2	2	Fund. 303.
117	5¾	99.26	27 15.554	2.5676	−31 25 50.28	.761	3	2	Pr. Mo. (?)
122	5½	99.16	28 21.071	2.3784	−40 12 27.59	.820	2	2	
123	5¾	99.14	29 33.240	2.9946	− 5 28 6.32	.884	2	2	
142	6	99.19	32 51.560	2.5777	−31 43 44.16	16.059	2	2	
140	6¼	99.14	32 57.365	2.9464	− 8 58 29.43	.065	2	2	
149	5½	99.26	34 7.124	2.3385	−42 44 22.91	.125	2	2	
144	5¼	99.18	34 44.926	3.0632	− 0 41 19.40	.157	2	2	
146	7¾	99.26	34 53.074	2.9294	−10 15 35.32	.165	2	2	
147	6½	99.19	34 54.378	2.9316	−10 7 4.29	.167	2	2	
152	6½	99.27	35 27.209	2.9292	−10 18 57.24	.194	2	2	
154	5.0	99.20	35 30.734	2.8780	−13 52 42.35	.197	2	2	
156	7	99.14	36 34.477	2.9340	−10 2 51.32	.252	2	2	
166	5½	99.23	39 44.617	2.6761	−27 18 42.24	.412	2	2	Pr. Mo. −ˢ.004 +0″.03
167	6½	99.18	40 0.860	2.7584	−22 17 35.12	.426	2	2	
170	7¼	99.14	40 19.562	2.6800	−27 10 12.93	.442	2	2	
182	6	99.19	42 36.414	2.3368	−44 17 35.16	.555	2	2	
178	6¾	99.18	43 14.581	2.9834	− 6 46 53.01	.586	2	2	
180	7¾	99.14	43 35.485	2.9826	− 6 51 14.20	.604	2	2	
191	7	99.16	45 42.914	2.9831	− 6 54 49.93	.707	2	2	
198	5	99.26	46 4.140	2.3284	−45 15 57.65	.724	2	2	Pr. Mo. (?)
193	6.1	99.19	46 11.657	3.0241	− 3 46 28.00	.730	2	2	Fund. B. J.
192	7	99.26	46 13.706	3.0549	− 1 23 13.90	.732	2	2	Pr. Mo. +ˢ.007 −0″.17 (?)
195	6¼	99.27	46 22.669	2.9991	− 5 42 54.86	.740	2	2	Pr. Mo. (?)
196	5¼	99.27	46 40.076	2.8844	−14 22 38.66	.753	2	2	
200	5½	99.28	47 33.333	2.9748	− 7 38 2.90	.796	2	2	
203	7½	99.29	48 26.752	2.9521	− 9 25 57.00	.838	2	2	
210	7¼	99.18	50 19.919	2.9391	−10 33 40.26	.927	2	2	
213	6¾	99.28	50 21.208	2.3608	−44 48 38.57	.927	2	2	N. f. dup. Pr. Mo. (?)
219	6¼	99.26	52 38.542	3.0547	− 1 27 56.49	17.034	2	2	N. pr.
220	7¾	99.26	52 43.245	3.0546	− 1 28 12.43	.038	2	2	S. fol.
227	5¾	99.16	54 34.860	2.5782	−35 24 43.58	.124	2	2	Pr. Mo. −ˢ.010 −0″.02
228	6¾	99.14	55 55.482	3.0401	− 2 42 31.94	.184	2	2	
231	7¾	99.18	56 59.576	2.9222	−12 25 1.41	.232	2	2	Pr. Mo. (?)
232	6½	99.16	57 42.386	2.9181	−12 48 53.20	.264	2	2	Pr. Mo. −ˢ.009 0″.00
241	4.6	99.24	10 0 15.276	2.9238	−12 34 46.86	.377	10	10	Fund. 303.
247	7	99.18	1 4.363	2.6188	−34 23 47.14	.412	2	2	
1	6	99.19	5 9.390	2.9834	− 7 55 0.86	.586	2	2	
2	4.0	99.18	5 42.760	2.9385	−11 51 34.76	.610	2	2	Fund. B. J.
5	6	99.26	5 57.515	2.9839	− 7 55 29.87	.620	2	2	
6	6	99.26	6 18.049	2.9966	− 6 49 26.07	.635	2	2	Error 1ˢ C. G. C. (?)
8	7	99.27	8 17.778	2.9853	− 7 57 0.01	.717	2	2	
11	7	99.28	8 29.661	3.0225	− 4 35 28.46	.725	2	2	
15	7	99.18	8 44.481	3.0212	− 4 43 28.15	.735	2	2	
16	6½	99.19	8 45.945	2.9974	− 6 53 21.39	.736	2	2	Pr. Mo. −ˢ.015 +0″.05
18	6¼	99.26	8 59.724	2.6756	−32 32 17.56	.746	2	2	Pr. Mo. − .030 +0 .03
17	6¼	99.26	9 9.369	2.9909	− 7 29 49.85	.752	2	2	
29	4½	99.29	10 32.265	2.5266	−41 37 36.77	.808	2	2	Pr. Mo. − .017 +0 .06
32	6	99.27	11 19.669	2.5111	−42 36 47.35	.839	2	2	
33	5.8	99.24	12 39.626	2.9925	− 7 34 10.03	.892	4	4	Fund. 303.
35	7¼	99.18	13 9.849	3.0648	− 0 44 37.62	.912	2	2	
39	5½	99.26	13 32.544	2.7476	−28 29 31.22	.927	2	2	
41	6¼	99.26	14 30.205	3.0249	− 4 36 9.90	.965	2	2	
43	8	99.27	14 31.577	2.7509	−28 27 31.58	.965	2	2	
56	7½	99.18	17 46.403	2.7523	−29 3 9.90	18.090	2	2	
61	5	99.19	18 2.161	2.5700	−41 8 48.24	.100	2	2	
59	6.1	99.26	18 23.220	3.0369	− 3 34 7.39	.113	2	2	Fund. 303.
66	6	99.27	19 6.598	2.6355	−37 30 8.29	.140	2	2	Pr. Mo. −ˢ.015 −0″.05
65	6½	99.26	19 19.613	2.7557	−29 8 30.75	.148	2	2	Pr. Mo. − .004 +0 .10

Star.	Mag.	Epoch.	R. A. 1900.0.	Precess.	Decl. 1900.0.	Precess.	No. Obs.		Notes.
			h m s	s	° ′ ″	″			
P 68	Neb.	1899.29	10 19 57.088	+2.8876	−18 8 11.29	−18.172	2	2	
71	6	99.28	20 44.347	3.0082	− 6 33 20.36	.200	2	2	Pr. Mo. −s.011 +0″.14
74	4.0	99.18	21 15.233	2.9092	−16 19 32.13	.219	2	2	Fund. B. J.
75	6¼	99.19	21 43.693	3.0350	− 3 52 45.53	.237	2	2	
82	4.2	99.27	22 34.599	2.7472	−30 33 30.73	.267	2	2	Fund. B. J.
81	8¼	99.26	22 51.757	3.0516	− 2 12 10.89	.277	2	2	
86	5¾	99.26	24 23.938	3.0517	− 2 13 37.99	.333	2	2	
90	6	99.19	24 51.776	2.7720	−29 9 8.16	.349	2	2	
92	8	99.29	24 56.342	2.7242	−32 53 47.01	.352	2	2	
91	6	99.28	24 59.129	2.7605	−30 5 43.26	.353	2	2	
94	6.4	99.26	25 58.368	3.0061	− 7 7 28.14	.388	2	2	Fund. 303.
103	7¼	99.26	27 39.654	2.8493	−23 5 15.40	.446	2	2	
106	6½	99.28	27 40.359	2.5567	−44 33 17.67	.447	2	2	S. pr.
107	6¼	99.29	27 41.219	2.5568	−44 33 8.47	.447	2	2	N. fol.
104	7	99.27	27 49.271	2.9183	−16 26 29.73	.452	2	2	
108	7½	99.19	28 16.574	2.7363	−32 51 16.05	.467	2	2	
113	5¾	99.26	28 43.670	2.5266	−46 29 18.21	.482	2	2	
119	5.8	99.27	29 15.440	2.8515	−23 13 47.45	.500	2	2	Fund. 303.
115	8½	99.29	30 5.976	2.7376	−33 14 53.47	.528	2	2	
118	6	99.18	31 23.687	2.9298	−15 49 34.88	.572	2	2	
120	6½	99.19	32 0.768	2.8160	−27 8 17.39	.592	2	2	
123	5¼	99.26	32 32.125	2.8202	−26 53 39.41	.609	2	2	
127	5.0	99.27	33 42.564	2.9284	−16 21 26.33	.647	6	6	Fund. 303.
130	7¼	99.18	34 16.093	2.9229	−17 3 21.29	.665	2	2	
134	6.4	99.25	36 18.944	3.0626	− 1 12 57.11	.730	4	4	Fund. B. J.
143	6	99.18	38 5.052	2.7783	−32 11 31.77	.785	2	2	
151	7	99.26	40 21.984	2.8187	−29 9 30.33	.854	2	2	
155	6	99.26	41 58.155	2.9382	−16 46 9.74	.901	2	2	
156	6¼	99.18	42 3.311	2.9515	−15 12 17.80	.903	2	2	
158	6¼	99.28	42 10.135	2.6623	−42 39 52.24	.907	2	2	
159	7¼	99.19	42 41.654	2.9533	−15 5 53.68	.922	2	2	8 mag. N. fol. 1s.
165	6¾	99.28	43 57.163	3.0071	− 8 34 15.37	.958	2	2	
—	7	99.26	43 57.991	3.0143	− 7 38 27.04	.959	1	1	
166	7	99.27	44 12.997	3.0462	− 3 29 42.49	.966	2	2	S. Dup. 2″ 8 mag. N.
167	3.3	99.29	44 41.405	2.9517	−15 40 13.12	.979	2	2	Fund. B. J.
168	6¼	99.18	45 12.677	3.0090	− 8 27 36.15	.994	2	2	
169	5.0	99.28	45 17.004	3.0098	− 8 22 4.34	.996	2	2	Fund. 303.
173	6	99.26	45 17.861	2.7890	−33 31 44.98	.996	2	2	
175	7	99.19	45 46.908	2.7932	−33 18 34.55	19.010	2	2	
174	7½	99.27	45 56.041	3.0104	− 8 21 26.11	.014	2	2	
176	7	99.29	46 12.247	2.9369	−17 48 8.18	.021	2	2	
178	6¾	99.26	46 37.419	3.0111	− 8 20 9.25	.033	3	2	
183	5.0	99.22	48 35.923	2.9268	−19 36 0.55	.086	4	4	Fund. 303.
189	7	99.19	49 35.379	2.9279	−19 42 5.91	.113	2	2	
199	5¼	99.18	52 3.424	2.7827	−36 35 59.72	.177	2	2	Pr. Mo. +s.005 −0″.12
208	5¾	99.19	54 30.490	2.8261	−33 12 0.71	.239	2	2	
209	4	99.26	54 54.155	2.9527	−17 45 58.22	.249	2	2	Pr. Mo. −s.034 +0″.14
215	5½	99.26	55 33.968	2.7423	−41 41 21.97	.264	2	2	Pr. Mo. + .002 −0 .02
216	6	99.18	55 55.928	2.8484	−31 18 20.14	.274	2	2	
218	5.0	99.28	56 43.588	3.0603	− 1 56 45.98	.292	6	6	Fund. 303.
222	6	99.19	57 33.894	2.8950	−26 17 24.71	.312	2	2	Pr. Mo. +s.003 −0″.12
223	7	99.26	57 52.234	3.0596	− 2 5 49.61	.320	2	2	
232	6¼	99.26	59 12.397	3.0682	− 0 44 20.80	.351	2	2	
233	7½	99.18	59 38.251	3.0607	− 1 58 24.65	.360	2	2	
237	5	99.28	11 0 30.812	2.8998	−26 45 14.30	.380	2	2	Pr. Mo. −s.017 0″.00
240	6	99.26	1 6.535	2.9015	−26 44 50.70	.393	2	2	
248	5¾	99.27	2 39.088	2.7736	−42 5 56.07	.428	2	2	Pr. Mo. (?)
250	6¾	99.30	3 10.399	3.0649	− 1 21 41.50	.439	2	2	
256	5¾	99.28	3 53.551	2.9038	−27 32 18.45	.454	2	2	
255	6¾	99.29	4 7.311	3.0683	− 0 47 28.50	.459	2	2	

Star.	Mag.	Epoch.	R. A. 1900.0.	Precess.	Decl. 1900.0.	Precess.	No. Obs.		Notes.
			h m s	s	° ′ ″	″			
P 2	6	1899.30	11 5 4.917	+2.8758	−31 49 29.08	−19.479	2	2	
3	7	99.27	5 46.695	2.8767	−32 1 16.47	.493	2	2	
6	4.0	99.28	6 44.327	2.9466	−22 16 47.48	.513	2	2	Fund. B. J.
16	6¼	99.26	9 11.808	2.9865	−16 20 33.96	.561	2	2	
23	4.6	99.28	11 34.633	3.0575	− 3 6 17.53	.606	4	4	Fund. 303.
32	7¼	99.26	13 11.420	3.0513	− 4 30 59.76	.635	2	2	Pr. Mo. +ˢ.052 −0″.15
35	6¾	99.27	13 40.708	2.9543	−23 47 49.12	.644	2	2	
38	3.3	99.32	14 20.400	3.0056	−14 14 14.22	.656	8	8	Fund. B. J.
39	8¾	99.28	14 39.759	3.0435	− 6 21 1.49	.661	2	2	N. pr.
39	8¼	99.26	14 40.116	3.0435	− 6 21 6.98	.661	2	2	S. fol.
51	7	99.27	17 58.205	2.8976	−35 41 37.82	.716	2	2	
49	7	99.30	17 58.580	2.9836	−20 4 38.17	.716	2	2	
55	5	99.26	18 22.030	2.8997	−35 36 57.87	.722	2	2	
53	5½	99.26	18 24.394	2.9933	−18 13 49.06	.723	2	2	Pr. Mo. −ˢ.023 −0″.04
57	7	99.28	18 56.587	2.9025	−35 32 24.59	.731	2	2	
58	5½	99.29	19 33.497	3.0300	−10 18 38.91	.741	2	2	
62	4.0	99.32	19 53.078	3.0009	−17 8 5.00	.746	4	4	Fund. B. J.
68	5¼	99.27	20 38.482	2.9096	−36 30 51.06	.757	2	2	Pr. Mo. −ˢ.011 +0″.01
72	6.0	99.26	22 7.262	3.0267	−11 48 25.69	.779	2	2	Fund. 303.
73	7	99.26	22 27.910	3.0269	−11 53 2.92	.784	2	2	
77	6¼	99.31	22 47.030	3.0684	− 1 8 58.22	.788	2	2	
81	6	99.30	23 45.994	2.8824	−42 7 27.91	.802	2	2	Pr. Mo. (?)
89	5.0	99.34	25 12.270	3.0641	− 2 27 6.43	.821	2	2	Fund. 303.
91	7½	99.26	25 45.531	3.0512	− 6 10 3.14	.829	2	2	
94	6½	99.27	26 51.379	3.0527	− 5 54 59.01	.843	2	2	
95	6¼	99.33	27 18.595	2.9686	−28 42 54.46	.848	2	2	S. p. Pr. Mo. +ˢ.002 +0″.18
96	6	99.30	27 18.917	2.9686	−28 42 47.83	.848	2	2	N. f. Pr. Mo. + .002 +0 .18
97	8	99.31	27 31.345	2.9618	−30 25 10.12	.851	2	2	
98	6	99.34	27 42.528	3.0488	− 7 16 31.49	.853	2	2	
101	6	99.28	27 55.946	2.9169	−39 53 8.35	.856	2	2	
99	5	99.29	27 57.270	2.9635	−30 32 7.19	.856	2	2	
103	4.0	99.27	28 4.884	2.9599	−31 18 15.67	.858	2	2	Fund. B. J.
104	7½	99.26	28 32.481	3.0535	− 5 59 4.77	.863	2	2	
105	6	99.33	28 44.817	2.9200	−40 2 5.53	.866	2	2	
108	7	99.26	29 16.195	3.0572	− 4 58 29.52	.872	2	2	
110	6	99.30	29 37.930	2.9611	−32 18 6.83	.877	2	2	Pr. Mo. −ˢ.053 +0″.84
112	8	99.31	30 51.912	2.9574	−34 14 0.50	.890	2	2	
114	4.3	99.34	31 36.510	3.0458	− 9 14 56.96	.898	2	2	Fund. 303.
115	6½	99.26	31 37.253	2.9654	−33 0 56.81	.898	2	2	Dup. N. f. Pr. Mo. +ˢ.014 +0″.07
117	7¾	99.28	31 42.164	2.9612	−34 5 48.02	.899	2	2	Pr. Mo. (?)
118	6	99.29	31 59.073	3.0055	−22 23 46.83	.902	2	2	
120	6	99.27	32 3.503	2.9694	−32 25 57.19	.903	2	2	
124	6½	99.26	32 48.543	2.9789	−30 39 47.31	.911	2	2	
126	6½	99.30	33 17.498	3.0676	− 1 52 57.48	.916	2	2	Dup. 9½ 4″ N. pr.
127	7½	99.33	33 23.257	2.9719	−33 3 6.99	.917	2	2	
128	5½	99.31	33 35.265	3.0382	−12 39 5.19	.919	2	2	Pr. Mo. +ˢ.004 +0″.13
130	6¾	99.28	34 25.289	3.0394	−12 37 34.72	.927	2	2	Pr. Mo. + .003 −0 .14
131	7½	99.26	34 47.287	2.9721	−34 25 39.43	.931	2	2	
133	5½	99.27	35 14.711	2.9748	−34 11 26.10	.935	2	2	Pr. Mo. − .004 +0 .01
136	7	99.26	36 7.162	3.0325	−16 7 40.78	.943	2	2	
141	5½	99.29	36 44.231	2.9884	−31 56 38.45	.949	2	2	S. pr.
142	8½	99.30	36 46.832	3.0178	−22 5 53.85	.949	2	2	
143	8¼	99.31	36 47.952	2.9885	−31 55 50.06	.949	2	2	N. fol.
145	6¼	99.34	37 0.616	3.0247	−19 44 16.60	.951	2	2	
148	5¾	99.26	38 48.599	3.0595	− 6 7 15.99	.966	2	2	
150	5.0	99.30	39 41.600	3.0347	−17 47 40.88	.973	6	6	Fund. 303.
154	6	99.28	40 46.974	2.9602	−45 8 4.85	.982	3	3	
L 4887	6	99.29	41 45.055	2.9836	−39 57 22.76	.989	2	2	Pr. Mo. −ˢ.133 +0″.39
161	5½	99.26	43 42.015	3.0260	−26 11 37.02	20.001	2	2	Pr. Mo. − .004 −0 .01
167	5½	99.26	45 55.477	3.0658	− 4 46 38.55	.014	2	2	

Star.	Mag.	Epoch.	R. A. 1900.0.	Precess.	Decl. 1900.0.	Precess.	No. Obs.		Notes.
			h m s	s	° ′ ″	″			
P 168	5½	1899.27	11 46 8.665	+2.9930	−44 37 2.45	−20.015	2	2	Pr. Mo. −ˢ.012 +0″.01
172	5	99.26	47 51.368	3.0261	−33 21 6.22	.024	2	2	
173	8¼	99.29	48 20.497	3.0688	− 3 19 38.49	.026	2	2	
175	6	99.28	48 23.778	3.0262	−34 30 34.79	.026	2	2	Pr. Mo. (?)
179	7¼	99.26	48 45.216	3.0690	− 3 13 9.61	.028	2	2	
182	7½	99.27	49 43.783	3.0718	− 0 53 10.75	.032	2	2	Pr. Mo. +ˢ.010 −0″.34
188	7½	99.30	50 19.551	3.0682	− 4 34 39.90	.034	2	2	
191	6	99.26	50 34.912	3.0436	−27 55 10.49	.035	2	2	
193	6.0	99.28	50 55.118	3.0569	−16 35 38.44	.036	4	4	Fund. 303.
206	7	99.26	53 40.111	3.0633	−14 18 26.77	.045	2	2	
212	5¾	99.26	55 44.240	3.0641	−19 6 8.62	.049	2	2	
213	6½	99.27	55 54.533	3.0722	− 1 12 33.44	.049	2	2	
219	7½	99.26	57 52.679	3.0678	−21 35 45.65	.051	2	2	
221	6¾	99.30	58 28.458	3.0719	− 4 55 21.00	.052	2	2	
220	5½	99.28	58 28.726	3.0647	−41 52 26.63	.052	2	2	Pr. Mo. +ˢ.026 −0″.12
225	7½	99.27	59 9.462	3.0709	−20 28 54.83	.052	2	2	
230	6.5	99.26	12 0 52.555	3.0729	− 2 34 27.44	.052	2	2	Fund. 303.
230		00 31	52.515		27.89		4	4	
231	7¼	99.34	1 8.328	3.0754	−22 14 24.24	.051	2	2	
234	7	00.28	1 53.594	3.0774	−23 12 38.02	.051	2	2	
237	7	99.30	2 7.450	3.0742	− 6 12 33.58	.051	2	2	
240	6¼	99.28	3 10.307	3.0852	−34 7 5.83	.050	2	2	
241	4	99.29	3 15.201	3.0812	−24 10 16.61	.050	2	2	
243	6	99.27	3 43.360	3.0935	−43 46 6.33	.049	2	2	Pr. Mo. (?)
247	6¼	99.34	4 52.635	3.0920	−34 8 52.83	.048	2	2	3″ dup. S. pr.
248	3.0	99.31	4 58.803	3.0845	−22 3 49.20	.047	2	2	Fund. B. J.
248		00.36	58.761		48.61		2	2	
1	7¼	99.30	5 19.230	3.0868	−24 24 8.91	.047	2	2	
4	6	00.28	5 54.862	3.0855	−23 2 43.61	.045	2	2	
5	7½	00.29	6 31.677	3.0947	−30 2 49.83	.044	2	2	
14	7¾	99.34	8 27.382	3.0917	−21 4 42.39	.038	2	2	
15	5¾	00.33	8 48.861	3.1244	−45 10 3.72	.037	2	2	
17	6½	99.30	9 7.997	3.0775	− 5 9 49.33	.036	2	2	Pr. Mo. −ˢ.008 +0″.14
18	6¼	00.29	9 49.481	3.0939	−20 17 17.87	.034	2	2	
21	7½	00.36	10 21.421	3.0872	−13 30 56.96	.032	2	2	
24	2.0	00.28	10 39.680	3.0917	−16 59 11.23	.030	2	2	Fund. B. J.
25	7	00.33	10 40.770	3.0874	−13 15 38.34	.030	2	2	
32	6¾	99.31	13 1.289	3.0772	− 3 23 56.95	.020	2	2	S. pr.
33	6¼	99.30	13 1.712	3.0772	− 3 23 37.46	.020	2	2	N. fol.
35	7	99.34	13 23.564	3.0842	− 8 20 48.29	.018	2	2	N. pr.
35		00.27	23.524		48.62		1	1	
41	6½	00.35	14 11.343	3.0849	− 8 21 31.26	.014	3	3	S. fol.
47	6	00.29	15 0.008	3.1074	−21 37 11.20	.009	2	2	N. pr.
51	5½	00.33	15 22.788	3.1083	−21 39 35.88	.007	2	2	S. fol.
54	5.9	00.36	15 45.850	3.0939	−13 0 39.64	.005	3	3	Fund. 303.
61	6¼	99.30	17 47.712	3.1195	−24 19 4.51	19.997	2	2	S. pr.
63	6¾	99.31	18 0.847	3.0851	− 6 44 41.08	.990	2	2	
65	6½	00.28	18 6.804	3.0809	− 4 25 9.35	.990	2	2	
64	5¼	99.34	18 8.847	3.1204	−24 17 8.43	.989	2	2	N. fol.
66	6	00.29	18 19.792	3.1471	−34 51 28.86	.988	2	2	
69	7¼	00.33	19 12.119	3.0923	− 9 55 19.78	.982	2	2	
74	6	00.36	20 5.479	3.1535	−34 37 55.69	.975	2	2	Pr. Mo. −ˢ.013 −0″.02
80	5¾	99.30	21 35.421	3.1521	−32 16 32.89	.963	2	2	Pr. Mo. − .003 −0 .05
82	8¾	99.31	22 6.085	3.1538	−32 13 24.24	.959	2	2	3′ N. fol.
87	6¼	99.34	22 37.890	3.1107	−16 4 42.47	.954	2	2	
89	7½	00.28	22 38.977	3.0769	− 1 49 38.34	.954	2	2	Pr. Mo. −ˢ.009 −0.″21
91	6.3	00.33	22 43.657	3.0821	− 4 3 42.80	.954	4	4	Fund. 303.
92	6	00.36	23 3.346	3.1794	−38 29 13.71	.951	2	2	
98	6½	00.33	24 1.836	3.0773	− 1 52 34.71	.942	2	2	
101	2.3	99.30	24 41.337	3.1138	−15 57 30.90	.936	2	2	Fund. B. J.

Star.	Mag.	Epoch.	R. A. 1900.0.	Precess.	Decl. 1900.0.	Precess.	No. Obs.		Notes.
			h m s	s	° ′ ″	″			
P 101		1900.37	12 24 41.309	+3.1138	−15 57 31.06	−19.936	2	2	
104	6½	00.29	24 55.397	3.1058	−12 50 21.16	.934	2	2	Pr. Mo. −ˢ.018 −0″.07
105	6	99.31	25 3.335	3.1350	−23 8 37.33	.932	2	2	
108	6¼	99.34	25 42.273	3.0819	− 3 30 30.41	.926	2	2	
111	6¼	00.28	26 30.149	3.0849	− 4 30 3.29	.918	2	2	
112	7¾	00.36	26 36.858	3.1147	−15 9 42.87	.917	2	2	
115	4½	00.33	26 54.832	3.1166	−15 38 31.37	.914	2	2	Pr. Mo. −ˢ.031 −0″.07
117	8	99.30	28 33.177	3.1431	−22 57 39.31	.897	2	2	N. pr.
119	5½	99.31	28 36.995	3.0988	− 8 54 1.14	.896	2	2	
121	7	00.29	28 49.731	3.1439	−22 59 42.14	.894	2	2	S. fol.
123	2.3	00.33	29 7.941	3.1441	−22 50 37.55	.890	2	2	Fund. B. J.
125	7½	00.37	29 15.630	3.0753	− 0 51 23.18	.889	2	2	
131	6	00.28	30 22 560	3.2234	−40 28 15.67	.876	2	2	Pr. Mo. (?)
134	9	00.36	31 20.507	3.1244	−15 50 4.62	.865	2	2	
136	5¾	99.30	31 38.187	3.0897	− 5 16 50.83	.861	2	2	
140	5½	99.31	32 23.995	3.1670	−26 35 10.47	.852	2	2	Pr. Mo. +ˢ.006 −0″.15
143	6¼	99.34	33 34.736	3.0857	− 3 49 25.10	.837	2	2	
146	5.0	00.28	34 5.036	3.0986	− 7 26 43.00	.831	2	2	Fund. 303.
147	8¾	00.36	34 12.897	3.0988	− 7 28 50.18	.829	2	2	S. fol.
152	7	00.33	34 21.076	3.0921	− 5 33 2.96	.827	2	2	
149	5½	00.29	34 27.620	3.2373	−39 26 13.90	.826	2	2	
153	5¾	99.30	35 53.252	3.2856	−45 35 55.45	.807	1	1	Pr. Mo. (?)
153		00.37	53.277		50.93		2	2	
157	3.3	99.34	36 35.373	3.0761	− 0 54 0.98	.797	2	2	Fund. B. J. N. pr.
158	3.3	99.31	36 35.586	3.0761	− 0 54 6.17	.797	2	2	Fund. B. J. S. fol.
159	6½	00.28	36 47.295	3.0988	− 6 57 1.62	.794	2	2	
*168	6	00.28	38 40.601	3.1910	−27 46 30.38	.767	2	2	Pr. Mo. −ˢ.004 −0″.05
170	6½	00.33	39 3.164	3.0818	− 2 17 40.44	.762	2	2	
178	7½	99.31	41 48.718	3.1035	− 7 15 7.33	.719	2	2	
183	6.5	99.34	42 23.262	3.0975	− 5 45 16.46	.710	2	2	Fund. 303.
183		00.32	23.265		16.21		4	4	
193	6¾	99.30	44 55.881	3.1051	− 7 5 15.44	.668	2	2	Pr. Mo. −ˢ.015 0″.00
194	5	99.31	45 15.518	3.2460	−33 27 14.47	.662	2	2	Pr. Mo. − .004 −0 .03
196	6¼	99.34	46 10.647	3.1189	− 9 47 38.10	.646	2	2	
197	6½	00.29	46 29.774	3.2580	−34 32 18.44	.641	2	2	
205	5	00.33	47 53.724	3.3024	−39 38 7.46	.616	2	2	Pr. Mo. +ˢ.003 −0″.03
207	8	00.36	47 54.584	3.1441	−14 25 23.02	.616	2	2	
208	6¼	00.28	48 3.858	3.0873	− 3 0 35.58	.613	2	2	Pr. Mo. −ˢ.018 0″.00
210	7	99.31	48 24.913	3.1147	− 8 31 11.76	.606	2	2	
214	5.0	00.29	49 9.076	3.1178	− 8 59 44.94	.593	2	2	Fund. 303.
216	8¼	99.34	49 15.606	3.1081	− 7 5 0.88	.591	2	2	
L 5319	6	99.30	49 24.235	3.3450	−43 36 13.26	.588	2	2	Pr. Mo. −ˢ.017 −0″.27
215	7½	00.33	49 32.430	3.3285	−41 44 54.89	.586	2	2	
218	5½	00.36	49 44.506	3.3353	−42 22 22.80	.582	2	2	
219	7	00.28	50 13.477	3.0929	− 3 57 50.07	.573	2	2	
225	7¼	99.31	51 50.586	3.1916	−21 37 49.13	.541	2	2	
229	7	00.29	52 49.864	3.1993	−22 30 51.43	.522	2	2	
233	8¼	00.33	53 24.286	3.2720	−32 51 0.17	.510	2	2	
234	6½	00.28	53 37.619	3.1917	−21 0 21.58	.506	2	2	
237	6	99.34	54 30.363	3.0903	− 3 16 21.12	.488	2	2	
238	5½	99.30	55 4.076	3.2790	−32 57 49.71	.476	2	2	S. pr.
241	6½	00.36	55 26.917	3.0886	− 2 49 50.96	.468	2	2	
239	6¾	99.31	55 33.789	3.2818	−33 5 2.42	.466	2	2	10″ N. fol. Pr. Mo. (?)
240	7½	00.29	55 36.511	3.2806	−32 56 24.63	.465	2	2	N. fol.
247	8	99.34	57 31.339	3.2946	−33 45 16.36	.424	2	2	S. pr.
251	6½	99.30	58 14.976	3.2970	-33 42 46.89	.408	2	2	N. fol.
254	6¼	99.31	58 45.186	3.0912	− 3 7 30.60	.397	2	2	
259	8½	00.28	13 0 9.346	3.1191	− 7 36 46.33	.365	2	2	
262	6½	00.33	1 10.292	3.1631	14 22 51.76	.342	2	2	
263	7½	00.36	1 25.933	3.3078	−33 35 3.07	.336	2	2	Pr. Mo. (?)

* 168 same as 169: one star only.

Star.	Mag.	Epoch.	R. A. 1900.0.	Precess.	Decl. 1900.0.	Precess.	No. Obs.		Notes.	
			h m s	s	° ′ ″	″				
P 271	7¾	1899.30	13 2 0.431	+3.1074	− 5 32 48.77	−19.323	2	2		
272	5¾	00.29	2 39.376	3.1377	−10 12 20.58	.307	2	2		
274	7	00.28	3 16.899	3.2242	−22 34 16.86	.292	2	2	N. pr.	
276	4¼	99.34	3 40.044	3.2252	−22 35 0.35	.283	2	2	S. fol.	
277	7¾	00.37	3 41.579	3.1568	−12 54 26.71	.283	2	2		
280	6	00.33	4 31.167	3.1368	− 9 47 45.16	.263	2	2		
281	4.3	99.28	4 46.255	3.1054	− 5 0 18.63	.257	6	6	Fund. B. J.	
281		00.37	46.241		18.41		4	4		
3	7¾	99.30	5 36.290	3.1364	− 9 34 14.34	.236	2	2		
1	5¾	00.29	5 40.070	3.4230	−42 50 10.04	.235	2	2	Pr. Mo. (?)	
7	5½	00.28	6 28.497	3.3637	−37 16 22.27	.214	2	2		
9	5.0	99.31	6 44.135	3.1803	−15 39 32.65	.208	2	2	Fund. 303.	
9		00.38	44.076		32.68		2	2		
19	7½	00.33	8 5.254	3.1626	−12 56 20.97	.174	2	2		
17	7	99.34	8 5.998	3.2021	−18 17 44.19	.173	2	2	S. pr.	
17	7½	00.36	8 6.243	3.2021	−18 17 40.07	.173	2	2	N. fol.	
20	5½	00.29	8 49.687	3.2120	−19 24 19.68	.155	2	2	Pr. Mo. ———	+0″.17
23	7¼	00.37	9 30.510	3.1420	− 9 50 22.43	.137	2	2		
25	6¾	99.30	9 41.663	3.1493	−10 49 52.58	.132	2	2	Pr. Mo. −ˢ.017	−0″.33
26	7¾	00.28	9 45.423	3.1493	−10 49 8.32	.131	2	2	N. fol.	
28	7¾	99.31	10 17.350	3.1261	− 7 31 40.12	.117	2	2		
29	6	00.29	10 34.160	3.2154	−19 24 40.96	.109	2	2	Pr. Mo. +ˢ.020	−0″.12
31	5½	99.34	11 19.735	3.3184	−30 58 36.94	.089	2	2	Pr. Mo. + .003	−0 .06
34	8½	00.36	11 37.476	3.1189	− 6 24 24.23	.081	2	2		
33	7¼	00.33	11 41.616	3.1649	−12 37 50.77	.079	2	2		
38	6½	00.38	12 12.688	3.1459	−10 1 9.63	.065	2	2		
44	5	00.28	13 10.262	3.2069	−17 45 18.88	.039	2	2	Pr. Mo. −ˢ.076	−1″.06
46	7¼	99.31	13 21.432	3.1150	− 5 44 21.11	.034	2	2		
45	3.2	99.30	13 29.024	3.2484	−22 38 39.00	.031	2	2	Fund. B. J.	
45		00.40	28.981		38.71		4	4		
47	7½	00.39	13 42.284	3.1635	−12 7 18.16	.024	2	2		
49	8	00.29	14 11.144	3.1525	−10 37 21.63	.011	2	2		
50	7½	99.34	14 20.436	3.1630	−11 57 29.13	.007	2	2		
52	7½	00.37	14 28.027	3.1568	−11 8 48.30	.003	2	2		
53	3	00.33	14 58.444	3.3869	−36 11 4.49	18.989	2	2	Pr. Mo. −ˢ.030	−0″.09
55	7	00.36	15 4.766	3.1546	−10 46 43.18	.986	2	2	Pr. Mo. − .011	+0 .01
56	7¾	00.38	15 12.910	3.1461	− 9 39 57.19	.982	2	2		
58	7	00.39	15 57.982	3.1453	− 9 28 33.09	.961	2	2		
59	7	00.28	16 7.253	3.2225	−18 57 54.07	.956	2	2		
60	7½	99.30	16 19.228	3.1594	−11 13 21.60	.951	1	2		
60		00.41	19.224		21.33		2	2		
62	6¾	99.31	16 50.948	3.1667	−12 3 21.16	.935	2	2		
67	7	00.29	17 19.296	3.1167	− 5 50 29.85	.922	2	2	Pr. Mo. −ˢ.004	−0″.18
64	8½	99.34	17 22.764	3.2124	−17 30 23.97	.920	2	2		
68	6	00.37	17 39.620	3.2104	−17 12 41.36	.912	2	2		
70	6	00.33	18 7.884	3.1071	− 4 24 4.72	.898	2	2		
72	7½	00.36	18 40.789	3.1549	−10 20 53.40	.882	2	2		
73	5½	99.30	19 20.783	3.1095	− 4 38 29.45	.863	2	2		
75	1	00.37	19 55.373	3.1585	−10 38 21.85	.845	8	8	Fund. B. J.	
74	5½	99 31	20 19.687	3.4475	−39 13 59.98	.833	2	2	Pr. Mo. (?)	
76	7	00.29	20 44.531	3.2079	−16 20 22.31	.821	2	2		
80	5	00.33	21 26.143	3.1732	−12 11 14.43	.800	2	2	Pr. Mo. −ˢ.012	−0″.02
81	8	00.39	21 41.511	3.1169	− 5 24 39.27	.792	2	2		
82	5	00.40	22 7.040	3.2023	−15 27 18.16	.779	2	2	Pr. Mo. −ˢ.011	+0″.03
86	7¼	99.30	22 46.465	3.2624	−21 52 51.17	.759	2	2		
87	7¾	00.28	22 56.919	3.2903	−24 41 41.10	.753	2	2		
88	8	00.36	23 12.974	3.1498	− 9 13 33.15	.745	2	2		
91	6½	99.31	23 50.802	3.1183	− 5 26 16.78	.725	2	2		
93	7¼	00.37	24 5.010	3.2305	−18 12 39.63	.718	2	2		
95	6¾	00.41	24 6.902	3.0798	− 0 50 42.95	.717	2	2		

Star.	Mag.	Epoch.	R. A. 1900.0.	Precess.	Decl. 1900.0.	Precess.	No. Obs.		Notes.
			h m s	s	° ′ ″	″			
P 94	8½	1900.38	13 24 14.791	+3.2743	−22 45 52.59	−18.713	2	2	Var.
97	7¾	00.33	24 35.831	3.2463	−19 47 43.38	.701	2	2	
101	6.6	00.29	25 12.624	3.1234	− 5 57 15.38	.682	2	2	Fund. 303.
99	4	00.39	25 14.669	3.4646	−38 53 27.18	.681	2	2	Pr. Mo. −ˢ.004 −0″.01
104	8¼	99.30	25 34.164	3.0877	− 1 45 33.24	.671	2	2	
103	8¼	00.36	25 38.061	3.1515	− 9 10 36.05	.669	2	2	C. G. C. +10ˢ
106	7	00.40	25 41.626	3.0943	− 2 32 5.41	.667	2	2	
108	8½	00.28	26 1.391	3.0877	− 1 44 48.08	.656	2	2	
107	7¾	00.41	26 20.382	3.3083	−25 35 58.71	.646	2	2	
114	7¼	00.38	26 36.336	3.0883	− 1 48 35.15	.637	2	2	Pr. Mo. −ˢ.059 +0″.23
111	6.0	00.37	26 39.143	3.2351	−18 12 47.92	.636	2	2	Fund. 303.
115	5	99.34	26 45.881	3.1224	− 5 44 22.43	.632	2	2	
112	6	00.37	26 59.088	3.3478	−29 3 2.57	.625	2	2	
117	6	00.29	27 30.954	3.2048	−14 50 54.99	.608	2	2	
118	5½	00.33	27 41.940	3.1576	− 9 38 59.83	.602	2	2	
119	7	00.39	27 48.087	3.0894	− 1 54 35.45	.599	2	2	
121	7	00.40	28 10.983	3.1353	− 7 6 32.80	.586	2	2	
124	7	99.30	29 0.617	3.1713	−11 1 22.41	.559	2	2	
126	7	00.28	29 21.382	3.1872	−12 42 5.98	.547	2	2	Var.
129	8½	99.34	30 13.152	3.1124	− 4 25 17.37	.518	2	2	
130	6	00.36	30 19.106	3.1166	− 4 53 12.23	.515	2	2	
132	8½	00.29	30 38.339	3.1568	− 9 16 23.84	.504	2	2	
135	6½	00.37	31 15.413	3.3253	−25 59 5.96	.484	2	2	10″ N. f. Pr. Mo. −ˢ.011 0″.00
139	7¾	00.38	31 40.381	3.2214	−15 56 10.52	.469	2	2	
142	7½	99.30	32 20.769	3.1404	− 7 21 42.30	.447	2	2	2″ dup. mean.
144	8½	00.33	32 25.323	3.1292	− 6 8 33.74	.444	2	2	
145	6¾	00.36	32 36.754	3.0978	− 2 43 33.10	.437	2	2	
143	7½	00.28	32 45.492	3.3685	−29 19 48.63	.432	2	2	
147	8¾	00.39	32 47.463	3.0825	− 1 3 53.15	.431	2	2	
146	6	00.37	33 4.787	3.3660	−29 3 0.06	.421	2	2	
148	8¼	99.34	33 20.461	3.1023	− 3 11 49.28	.412	2	2	
151	7½	00.29	33 58.216	3.2125	−14 42 0.82	.390	2	2	
152	7½	00.38	33 58.873	3.1819	−11 34 57.74	.390	2	2	
154	6½	99.31	34 33.296	3.3467	−27 4 12.40	.370	2	2	
158	7	99.30	35 39.999	3.1906	−12 16 34.29	.330	2	2	
159	7	00.28	35 59.672	3.3029	−22 56 38.82	.319	2	2	
162	6.0	99.34	36 21.758	3.1513	− 8 11 54.49	.306	2	2	Fund. 303.
162		00.38	21.709		54.42		8	8	
166	7¾	99.31	37 39.582	3.1781	−10 47 50.42	.259	2	2	
171	7¼	00.36	38 19.257	3.1094	− 3 46 12.16	.235	2	2	
174	6¾	00.37	38 41.937	3.1215	− 4 59 42.75	.221	2	2	
175	7¼	00.38	38 56.664	3.1808	−10 56 1.37	.212	2	2	
176	5½	99.30	39 5.979	3.2299	−15 40 33.69	.206	2	2	
177	7¼	00.37	39 22.933	3.2098	−13 43 4.19	.196	3	3	Pr. Mo. −ˢ.001 −0″.16
179	6¾	99.34	39 42.303	3.1432	− 7 7 55.95	.184	2	2	
182	8¼	00.40	40 0.153	3.0999	− 2 48 45.42	.173	2	2	
178	5	00.28	40 0.253	3.4332	−32 32 16.83	.173	2	2	Pr. Mo. −ˢ.039 −0″.15
180	6	00.33	40 1.928	3.3437	−25 36 50.88	.172	2	2	
181	6½	00.39	40 11.872	3.2272	−15 15 54.38	.166	2	2	
183	7¼	00.36	40 17.548	3.1918	−11 52 59.54	.163	2	2	N. pr.
185	7½	00.37	40 34.154	3.1803	−10 43 19.61	.152	2	2	
186	5½	00.38	40 36.437	3.1927	−11 55 31.48	.151	2	2	S. fol.
187	5¾	99.31	41 6.494	3.4836	−35 45 3.76	.132	2	2	
190	7¼	00.29	41 45.944	3.2677	−18 45 19.74	.107	2	2	
191	5¾	00.41	41 58.867	3.2526	−17 21 33.27	.099	2	2	
193	7¾	99.30	42 9.604	3.0923	− 1 56 37.37	.093	2	2	
192	7	00.40	42 11.742	3.1354	− 6 12 19.90	.092	2	2	
201	6½	99.34	43 4.027	3.1373	− 6 20 18.61	.058	2	2	
203	7¼	00.28	43 28.758	3.0966	− 2 20 31.63	.043	2	2	
197	4	00.33	43 30.217	3.5832	−41 11 22.12	.042	2	2	

Star.	Mag.	Epoch.	R. A. 1900.0.	Precess.	Decl. 1900.0.	Precess.	No. Obs.		Notes.
			h m s	s	° ′ ″	″			
P 198	4	1900.36	13 43 35.448	+3.5979	−41 58 31.43	+18.039	2	2	Pr. Mo. −s.005 −0″.01
202	5	00.37	43 38.960	3.4660	−33 57 3.89	.036	2	2	
204	5.0	99.31	44 26.198	3.2597	−17 38 9.48	.006	2	2	Fund. B. J.
206	7	00.29	44 44.635	3.2918	−20 22 21.78	17.994	2	2	
213	7¼	99.30	45 17.376	3.1466	− 7 6 4.17	.973	2	2	
212	8	00.38	45 26.968	3.2945	−20 29 18.98	.967	2	2	
218	6¾	00.39	45 35.404	3.1487	− 7 17 16.48	.962	2	2	
207	6¼	00.41	45 35.474	3.6969	−46 24 10.80	.962	2	2	
216	5½	99.34	46 3.200	3.4529	−32 29 53.31	.943	2	2	Pr. Mo. −s.002 −0″.10
217	7¾	00.40	46 3.821	3.4529	−32 29 56.53	.943	2	2	S. fol.
221	5	99.31	47 27.052	3.4419	−31 26 1.23	.888	2	2	8 mag. prec. S.
222	6	00.28	47 41.967	3.4993	−35 10 14.41	.878	2	2	Pr. Mo. (?)
227	7¾	00.29	48 1.117	3.1050	− 3 2 52.69	.866	2	2	
229	7	00.33	48 35.009	3.4004	−28 15 1.17	.843	2	2	
230	6¾	00.37	48 36.870	3.3981	−28 4 31.43	.842	2	2	Pr. Mo. (?)
231	3	00.38	49 17.944	3.7260	−46 47 47.03	.815	2	2	Pr. Mo. −s.009 −0″.04
237	5.6	99.30	49 33.949	3.0836	− 1 0 40.22	.804	2	2	Fund. 303.
237		00.38	33.974		40.04		6	6	
238	7	99.34	49 43.464	3.1545	− 7 33 59.68	.798	2	2	2″ dup. mean. Pr. Mo. −s.014
245	7½	99.31	51 19.656	3.1776	− 9 32 37.44	.733	2	2	C. G. C. +1 min.
246	5	00.29	52 11.418	3.6310	−41 36 45.10	.697	2	2	Pr. Mo. −s.004 −0″.03
252	8½	00.37	52 26.330	3.1278	− 4 59 36.91	.687	2	2	
249	5	00.36	52 30.057	3.6880	−44 18 54.47	.684	2	2	
253	5.8	00.33	52 54.358	3.3606	−24 29 2.67	.668	6	6	Fund. 303.
256	7	99.34	53 5.072	3.2023	−11 34 4.00	.661	2	2	Pr. Mo. +s.006 −0″.16
262	6	00.39	54 23.982	3.3646	−24 31 20.40	.605	2	2	Pr. Mo. − .015 −0 .10
269	6½	99.31	54 38.310	3.1070	− 3 3 45.27	.596	2	2	
270	6¾	00.40	54 48.329	3.1592	− 7 40 30.37	.589	2	2	
267	5¾	00.36	55 29.131	3.7209	−45 7 7.28	.560	2	2	
271	7¾	00.29	55 35.069	3.1588	− 7 35 12.08	.556	2	2	
274	6	99.34	56 41.470	3.4040	−26 56 48.99	.509	2	2	
278	8½	00.33	56 58.990	3.2062	−11 33 15.99	.496	2	2	
276	7½	00.28	57 1.771	3.3018	−19 19 38.08	.495	2	2	
286	6¼	99.30	59 2.061	3.2442	−14 29 27.95	.408	2	2	
287	6½	99.31	59 3.654	3.1752	− 8 46 38.33	.407	2	2	
290	7	00.39	59 48.566	3.2438	−14 22 35.57	.374	2	2	
291	8½	99.34	59 53.490	3.1734	− 8 34 9.48	.371	2	2	
288	5¼	00.40	59 56.383	3.6473	−40 42 2.05	.369	2	2	
294	8	00.33	14 0 37.478	3.4017	−26 6 2.11	.339	2	2	
295	4	00.36	0 40.532	3.4033	−26 12 1.82	.336	2	2	Pr. Mo. +s.002 −0″.14
293	2	00.29	0 47.693	3.5590	−35 52 41.36	.331	2	2	Pr. Mo. −s.046 −0″.52
297	6¼	00.37	0 59.906	3.1723	− 8 24 51.96	.322	2	2	
299	6	00.38	1 25.370	3.1777	− 8 50 11.04	.303	2	2	Pr. Mo. −s.012 +0″.02
298	8½	00.39	1 38.293	3.3032	−18 48 25.46	.294	2	2	
300	7¼	00.41	1 47.025	3.2633	−15 42 48.61	.287	2	2	
304	8¼	99.30	2 28.681	3.3104	−19 14 46.16	.257	2	2	
305	8	99.31	2 51.317	3.4083	−26 10 37.64	.240	2	2	
307	7¾	99.34	3 2.234	3.2192	−12 5 26.39	.231	2	2	
308	7	00.37	3 7.417	3.2101	−11 21 15.17	.228	2	2	
310	7½	00.33	3 28.923	3.3058	−18 46 10.16	.212	2	2	
311	6½	00.29	3 40.808	3.1921	− 9 51 38.57	.203	2	2	
317	5.8	99.30	5 22.697	3.2699	−15 49 47.19	.126	2	2	Fund. 303.
317		00.36	22.687		46.73		6	6	
3	7½	00.40	5 42.871	3.1399	− 5 30 6.68	.110	2	2	
2	7½	00.36	5 45.860	3.2143	−11 28 47.62	.109	2	2	
5	7½	99.31	5 59.103	3.1960	−10 0 26.57	.098	2	2	10s S. fol.
10	7¾	00.33	6 37.865	3.1422	− 5 39 23.07	.069	2	2	
9	5½	99.34	7 2.103	3.4280	−26 47 25.99	.050	2	2	
11	7	00.37	7 13.606	3.1897	− 9 25 47.54	.041	2	2	
13	7½	00.41	7 20.638	3.1035	− 2 30 4.69	.035	2	2	

Star.	Mag.	Epoch.	R. A. 1900.0.	Precess.	Decl. 1900.0.	Precess.	No. Obs.		Notes.
			h m s	s	° ′ ″	″			
P 14	4.3	1900.29	14 7 33.576	+3.1948	− 9 48 29.39	− 17.026	2	2	Fund. B. J.
15	7¼	00.39	7 35.072	3.1078	− 2 50 30.38	.024	2	2	Pr. Mo. −ˢ.010 −0″.31
19	7	00.36	9 8.734	3.1413	− 5 28 57.65	16.952	2	2	Pr. Mo. − .022 +0 .06
22	5½	99.31	9 53.300	3.3022	− 17 44 3.18	.917	2	2	
28	4.0	99.34	10 46.146	3.1425	− 5 31 24.01	.876	2	2	Fund. B. J.
28		00.38	46.134		24.59		10	10	
29	7¼	00.29	11 49.655	3.4352	− 26 29 43.08	.826	2	2	
33	5	00.36	13 0.023	3.8211	− 45 35 47.10	.769	2	2	Pr. Mo. −ˢ.001 −0″.01
34	6	99.30	13 21.928	3.4419	− 26 40 48.86	.752	2	2	
37	4½	99.31	13 41.823	3.2415	− 12 54 39.25	.736	2	2	
38	7½	99.34	13 54.015	3.3132	− 18 3 45.58	.726	2	2	
36	6¼	00.39	14 19.554	3.8050	− 44 43 29.31	.706	2	2	
43	6	00.33	14 23.212	3.0960	− 1 48 11.40	.703	2	2	
40	5½	00.37	14 28.342	3.6391	− 37 25 31.00	.699	2	2	
44	7	00.29	14 37.831	3.1543	− 6 17 8.35	.691	2	2	
53	6	00.36	16 19.998	3.5843	− 34 19 46.02	.608	2	2	
54	7	99.31	16 42.024	3.6844	− 39 10 1.88	.590	2	2	
59	6¼	99.30	16 49.263	3.0928	− 1 31 51.23	.584	2	2	
55	5¼	00.40	16 52.489	3.6826	− 39 3 18.39	.581	2	2	Pr. Mo. −ˢ.005 −0″.04
58	5¼	00.38	17 19.930	3.4618	− 27 17 42.48	.558	2	2	Pr. Mo. − .016 −0 .13
62	7½	00.33	17 21.040	3.1694	− 7 18 29.49	.558	2	2	N. pr. Pr. Mo. −0″.12
62	7½	00.41	17 21.186	3.1694	− 7 18 35.56	.558	2	2	S. fol. Pr. Mo. −0 .12
61	7¾	99.34	17 37.714	3.4636	− 27 21 35.43	.544	2	2	Pr. Mo. −ˢ.019 −0 .30
64	6.3	00.39	18 2.650	3.2234	− 11 15 26.05	.524	2	2	Fund. 303.
63	8¼	00.29	18 11.187	3.4638	− 27 17 29.67	.516	2	2	
68	6	00.37	19 6.165	3.4178	− 24 21 9.28	.472	2	2	Pr. Mo. (?)
70	6½	00.38	19 18.223	3.2241	− 11 12 56.56	.461	2	2	
74	7½	00.36	19 25.805	3.0979	− 1 53 23.08	.454	2	2	
66	5¼	99.31	19 42.999	3.8320	− 44 46 7.76	.440	2	2	
67	5¼	00.40	19 44.968	3.8362	− 44 55 37.95	.439	2	2	
76	6¼	99.30	19 52.483	3.2482	− 12 54 2.86	.429	2	2	
L5937	7	99.34	20 1.327	3.4534	− 26 23 55.77	.425	1	1	C. G. C. 19525
78	8¼	00.33	20 51.868	3.4555	− 26 24 22.85	.383	2	2	
81	8¼	00.29	21 29.285	3.0813	− 0 38 7.22	.351	2	2	
84	6½	00.40	22 9.324	3.1498	− 5 40 9.55	.317	2	2	
82	5½	00.37	22 18.895	3.5046	− 29 2 31.58	.309	2	2	Pr. Mo. −ˢ.005 −0″.03
85	7¼	00.36	22 19.844	3.2510	− 12 54 35.53	.308	2	2	
88	7½	99.30	22 53.566	3.1076	− 2 33 20.20	.280	2	2	
90	5.0	99.31	23 2.936	3.0969	− 1 46 47.14	.271	2	2	Fund. B. J.
90		00.28	2.922		46.94		2	2	
89	6¾	00.38	23 11.269	3.2043	− 9 33 21.17	.264	2	2	
91	6	00.39	23 25.094	3.1613	− 6 27 5.42	.252	2	2	
87	6	00.41	23 41.520	3.8536	− 44 52 28.63	.239	2	2	
94	7½	99.34	24 44.665	3.5078	− 28 51 54.03	.185	2	2	
95	7¼	00.29	24 47.734	3.1252	− 3 48 3.96	.182	2	2	
98	7¼	00.33	25 17.962	3.1228	− 3 37 12.58	.155	2	2	
100	8	00.37	25 30.917	3.1096	− 2 39 52.62	.145	2	2	
101	7½	99.30	25 46.740	3.1472	− 5 21 27.80	.130	2	2	Pr. Mo. −ˢ.017 −0″.05
104	7	99.31	27 47.465	3.7876	− 41 39 31.79	.026	2	2	
108	7¾	00.29	28 4.163	3.1643	− 6 29 43.34	.011	2	2	
111	7¾	00.37	28 24.141	3.1636	− 6 25 48.84	15.993	2	2	
106	8	00.40	28 37.690	3.9095	− 46 1 23.52	.982	2	2	
109	3	00.38	29 9.270	3.7948	− 41 43 8.91	.954	2	2	Pr. Mo. −ˢ.004 −0″.03
110	6	00.41	29 11.974	3.7789	− 41 4 43.43	.951	2	2	
116	6.8	99.30	29 12.985	3.3676	− 20 0 1.68	.951	2	2	Fund. 303.
113	6	00.40	29 46.242	3.9087	− 45 48 32.42	.921	2	2	
118	6	99.31	30 47.046	3.9103	− 45 41 49.87	.867	2	2	
118		00.46	47.130		50.46		2	2	
121	8	00.38	30 57.197	3.2049	− 9 10 30.90	.858	2	2	
122	8¼	00.41	30 58.091	3.1205	− 3 30 40.88	.857	2	2	

Star.	Mag.	Epoch.	R. A. 1900.0.	Precess.	Decl. 1900.0.	Precess.	No. Obs.		Notes.	
			h m s	s	° ′ ″	″				
P 127	6½	1900.29	14 31 40.547	+3.2456	−11 52 49.21	−15.818	2	2	Pr. Mo. −s.060	+0″.36
130	7	99.34	31 55.741	3.1224	− 3 27 23.38	.806	2	2		
129	7½	00.33	32 16.882	3.4180	−22 43 47.76	.786	2	2		
125	6¾	00.39	32 37.277	3.9322	−46 8 44.22	.768	2	2	Pr. Mo. −s.027	−0″.24
133	7¼	99.30	32 37.900	3.1466	− 5 6 51.30	.767	2	2		
134	7½	00.36	33 35.456	3.4528	−24 35 45.51	.716	2	2		
137	7	00.37	33 37.738	3.2210	−10 7 22.18	.714	2	2		
139	8	00.38	33 44.536	3.1506	− 5 21 15.40	.707	2	2		
135	6½	00.40	33 51.228	3.4835	−26 17 28.94	.701	2	2		
138	8	99.31	33 51.568	3.2368	−11 9 43.55	.701	2	2		
142	7¼	99.34	35 24.478	3.4147	−22 11 20.96	.616	2	2		
144	8	00.33	35 42.783	3.1614	− 6 1 44.94	.600	2	2		
141	5¼	00.29	35 44.747	3.7142	−37 21 51.87	.597	2	2		
146	7¼	00.36	36 36.641	3.2492	−11 48 26.59	.550	2	2		
151	8¼	00.37	36 55.454	3.2482	−11 43 34.98	.533	2	2		
153	8½	00.39	37 23.329	3.4622	−24 40 59.38	.507	2	2		
154	6	99.31	37 26.620	3.4603	−24 34 18.28	.504	2	2		
150	4½	00.40	37 32.376	3.6610	−34 44 34.89	.499	2	2	Pr. Mo. −s.009	−0″.20
158	4.0	00.40	37 47.328	3.1503	− 5 13 24.93	.485	4	4	Fund. B. J.	
159	5½	99.34	38 51.102	3.6657	−34 46 5.21	.425	2	2		
162	7½	00.29	39 7.170	3.1621	− 5 57 54.50	.410	2	2		
163	6	00.33	40 12.618	3.4742	−25 1 6.81	.350	2	2	Pr. Mo. −s.015	−0″.12
167	6	00.37	40 26.844	3.3041	−15 2 16.84	.336	2	2		
166	7	00.36	40 30.433	3.3991	−20 45 6.98	.333	2	2	Pr. Mo. −s.006	−0″.14
171	6½	00.38	41 32.391	3.4036	−20 54 19.21	.274	2	2		
169	5¼	99.31	41 33.491	3.4804	−25 12 16.13	.273	2	2		
173	5¾	00.39	41 54.424	3.4897	−25 40 5.89	.253	2	2		
176	6	99.34	42 6.452	3.5007	−26 13 38.33	.242	2	2		
181	7½	00.29	43 21.263	3.2698	−12 42 8.01	.171	2	2		
183	6	00.33	43 50.092	3.2869	−13 43 56.50	.143	2	2		
184	5¼	00.40	44 24.848	3.5311	−27 32 38.26	.110	2	2	Pr. Mo. −s.019	−0″.08
185	5½	00.37	45 6.600	3.8997	−43 9 43.67	.070	2	2		
186	6.0	99.34	45 9.224	3.3187	−15 34 53.21	.067	2	2	Fund. B. J.	
187	2.3	99.31	45 20.671	3.3197	−15 37 35.17	.057	2	2	Fund. B. J.	
187		00.36	20.684		34.75		2	2		
191	5¾	00.38	45 49.801	3.1018	− 1 52 57.36	.029	2	2	Pr. Mo. +s.004	−0″.15
188	6¼	00.41	45 59.244	3.3498	−17 22 27.62	.019	2	2		
190	6½	00.39	46 14.540	3.3599	−17 56 35.44	.005	2	2		
192	8¼	00.29	46 44.392	3.6548	−33 12 58.95	14.975	2	2		
194	8	00.33	47 0.168	3.3109	−14 58 36.25	.960	2	2		
195	8¼	00.40	47 5.525	3.3279	−15 59 12.83	.955	2	2		
203	7½	00.36	48 29.775	3.2095	− 8 40 38.30	.873	2	2		
199	5¾	99.34	48 31.536	3.4764	−24 13 59.91	.871	2	2		
206	6	00.37	48 57.033	3.2554	−11 29 25.44	.846	2	2		
208	8½	00.39	49 36.039	3.4971	−25 12 31.89	.808	2	2		
204	6	00.38	49 36.302	3.6682	−33 26 59.27	.808	2	2	Pr. Mo. +s.002	−0″.01
214	6.0	00.33	51 20.439	3.2495	−11 0 22.19	.705	2	2	Fund. 303.	
212	6½	00.36	51 37.519	3.4212	−20 57 52.61	.690	2	2	Pr. Mo. +s.072	−1″.80
213	6¾	99.34	51 40.892	3.4979	−25 2 20.03	.685	2	2		
220	5¾	00.40	51 57.584	3.1356	− 3 56 21.18	.668	2	2	Pr. Mo. −s.007	−0″.19
211	4	00.42	51 58.866	3.9148	−42 43 52.30	.667	2	2	Pr. Mo. −s.006	−0″.06
223	6½	00.41	52 29.654	3.3514	−16 57 44.79	.636	2	2		
216	3½	00.39	52 39.249	3.8876	−41 42 10.92	.626	2	2	Pr. Mo. − .004	−0.02
222	6¼	00.39	52 44.012	3.5440	−27 15 21.32	.621	2	2		
225	7	00.38	52 48.134	3.2465	−10 45 10.91	.617	2	2		
218	6¼	00.42	52 53.450	3.9193	−42 45 33.97	.612	2	2		
228	6¼	00.33	53 28.955	3.2469	−10 44 31.35	.576	2	2		
229	6½	00.41	53 40.042	3.1464	− 4 35 10.66	.565	2	2	Pr. Mo. −s.025	−0″.12
233	7	99.31	54 28.200	3.2442	−10 31 51.75	.517	2	2		
234	7¾	99.34	54 43.927	3.3768	−18 13 45.36	.502	2	2		

Star.	Mag.	Epoch.	R. A. 1900.0.	Precess.	Decl. 1900.0.	Precess.	No. Obs.		Notes.
			h m s	s	° ′ ″	″			
P 238	5.6	1900.29	14 55 37.674	+3.2050	− 8 7 19.43	−14.448	2	2	Fund. 303.
239	6	00.40	56 8.074	3.1110	− 2 21 30.47	.417	2	2	Pr. Mo. (?)
237	7	00.36	56 8.702	3.5598	−27 39 52.26	.416	2	2	
241	6¾	00.33	56 49.099	3.1901	− 7 10 50.09	.375	2	2	
245	7	00.39	57 10.288	3.1947	− 7 26 45.85	.353	2	2	
246	7	00.38	57 29.104	3.3628	−17 14 18.87	.334	2	2	
249	6½	99.31	57 33.116	3.1155	− 2 38 13.98	.330	2	2	
252	7½	00.41	57 58.318	3.3449	−16 11 56.45	.304	2	2	
251	3.4	00.37	58 12.941	3.5079	−24 53 21.42	.289	2	2	Fund. B. J.
244	6¾	00.40	58 14.000	3.8729	−40 28 9.44	.288	2	2	
254	7½	99.34	58 17.199	3.1909	− 7 10 45.75	.285	2	2	
242	5	00.42	58 18.430	4.0670	−46 39 33.84	.284	2	2	Pr. Mo. −ˢ.005 −0″.03
250	5¾	00.29	58 49.053	3.8809	−40 40 37.48	.252	2	2	
256	8¼	00.36	59 12.037	3.3182	−14 36 23.67	.228	2	2	
257	8	00.38	59 15.787	3.0812	− 0 30 53.68	.225	2	2	
261	6¾	00.41	15 0 20.701	3.4891	−23 44 28.57	.158	2	2	
262	7	00.42	0 23.400	3.4734	−22 56 4.23	.155	2	2	
267	5¼	99.31	1 2.809	3.3426	−15 52 9.06	.115	2	2	
268	7½	00.39	1 5.018	3.2836	−12 31 10.02	.112	2	2	
269	6½	00.37	1 14.039	3.3470	−16 5 48.96	.102	2	2	
272	8¼	99.34	1 47.599	3.2158	− 8 32 33.42	.068	2	2	
266	5¾	00.40	2 6.416	4.0231	−44 53 43.35	.048	2	2	
276	7¾	00.38	2 39.673	3.2701	−11 39 55.28	.014	2	2	
280	7¼	00.41	3 31.549	3.3052	−13 37 2.26	13.960	2	2	
282	6¼	00.42	4 1.153	3.4929	−23 36 13.68	.928	2	2	
286	7	99.31	4 19.579	3.1571	− 5 0 41.60	.909	2	2	
289	8½	99.34	5 18.447	3.4574	−21 41 50.21	.847	2	2	
1	7¼	00.37	5 43.922	3.2906	−12 40 31.22	.820	2	2	
288	6	00.38	6 6.409	4.0135	−44 7 23.07	.797	2	2	
3	4.6	00.44	6 31.130	3.4152	−19 24 47.52	.770	4	4	Fund. B. J.
6	6	00.41	7 37.298	3.4140	−19 16 16.33	.700	2	2	
5	6¾	00.40	7 37.936	3.5265	−24 55 56.42	.699	2	2	Pr. Mo. −ˢ.029 −0″.08
9	7¼	00.42	7 48.827	3.2561	−10 37 50.52	.687	2	2	
8	7½	00.45	8 1.940	3.5083	−24 0 13.15	.674	2	2	
10	6	00.39	8 29.652	3.6648	−31 8 44.83	.645	2	2	
14	7	00.37	8 48.810	3.3925	−18 3 17.43	.623	2	2	N. pr.
15	8¾	00.41	8 50.938	3.3927	−18 3 53.65	.621	2	2	S. fol.
16	6½	00.40	8 55.044	3.3802	−17 23 42.26	.617	2	2	
17	7½	00.42	9 15.907	3.1241	− 2 59 29.35	.594	2	2	
11	6	00.38	9 29.212	3.9313	−41 7 12.37	.580	2	2	
19	6¾	00.45	10 35.006	3.4725	−22 1 47.00	.509	2	2	
26	2.0	00.44	11 37.447	3.2300	− 9 0 50.42	.442	4	4	Fund. B. J.
22	5	00.39	11 44.664	3.6406	−29 46 51.28	.435	2	2	
23	6½	00.38	12 22.843	3.9201	−40 25 18.52	.394	2	2	
28	7½	00.37	12 31.843	3.0835	− 0 37 6.34	.384	2	2	
32	7	00.41	13 58.442	3.2273	− 8 46 51.83	.289	2	2	
30	7	00.45	14 46.354	4.0622	−44 34 35.37	.237	2	2	
31	5	00.42	14 48.392	3.9240	−40 17 8.10	.234	2	2	Pr. Mo. −ˢ.003 −0″.03
38	8¼	00.39	15 4.477	3.2622	−10 40 14.64	.218	2	2	
37	6	00.40	15 13.392	3.3956	−17 47 43.90	.207	2	2	
40	7½	00.41	15 22.314	3.3426	−15 0 43.49	.197	2	2	
41	6¾	00.48	15 25.862	3.3429	−15 11 16.12	.194	2	2	
34	6	00.38	15 27.520	3.8015	−35 53 55.72	.192	2	2	Pr. Mo. −ˢ.008 −0″.08
43	7½	00.37	15 50.381	3.1832	− 6 15 8.93	.166	2	2	
35	4½	00.45	15 53.329	4.0579	−44 19 48.18	.163	2	2	
45	7½	00.40	16 14.594	3.1872	− 6 27 57.20	.140	2	2	
42	5	00.48	16 45.970	3.8214	−36 29 59.73	.106	2	2	
48	7¾	00.40	17 10.781	3.2568	−10 17 50.70	.078	2	2	Pr. Mo. (?)
50	6¼	00.41	17 27.072	3.3403	−14 46 37.53	.059	2	2	
47	6	00.45	18 12.931	3.9069	−39 21 13.49	.009	2	2	

Star.	Mag.	Epoch.	R. A. 1900.0.	Precess.	Decl. 1900.0.	Precess.	No. Obs.		Notes.	
			h m s	s	° ′ ″	″				
P 54	6¼	1900.39	15 18 22.945	+3.2893	−12 0 45.95	−12.999	2	2		
58	6.4	00.42	18 34.300	3.0846	− 0 39 56.90	.985	2	2	Fund. 303.	
57	5½	00.48	18 46.550	3.2518	− 9 57 46.03	.972	2	2	Pr. Mo. −ˢ.007	−0″.15
52	5¾	00.38	18 51.038	3.8804	−38 22 45.97	.966	2	2		
61	8¼	00.40	19 37.672	3.2351	− 9 1 23.26	.915	2	2		
63	7¼	00.41	19 46.431	3.1783	− 5 53 33.41	.905	2	2	N. fol. 13ˢ	
65	7	00.45	20 18.061	3.4668	−21 1 43.65	.869	2	2		
64	6	00.42	20 53.796	3.8306	−36 25 0.35	.830	2	2		
70	8¼	00.38	21 50.830	3.1714	− 5 28 4.17	.766	2	2		
71	7½	00.39	22 30.961	3.4665	−20 51 42.61	.721	2	2		
75	6.2	00.42	22 36.900	3.3763	−16 22 3.84	.714	4	4	Fund. 303.	
77	7¾	00.41	22 45.428	3.2757	−11 6 4.72	.704	2	2		
79	7¾	00.42	23 5.100	3.1753	− 5 39 21.59	.681	2	2		
80	7	00.48	23 55.237	3.3922	−17 5 45.33	.625	2	2		
84	6	00.37	25 1.778	3.3770	−16 15 58.86	.550	2	2		
87	8¼	00.38	25 20.006	3.4218	−18 29 36.75	.528	2	2		
88	7½	00.39	25 28.055	3.3624	−15 30 12.22	.519	2	2		
91	7	00.41	25 58.090	3.4498	−19 49 22.33	.485	2	2		
90	8	00.40	26 4.046	3.6250	−27 49 31.69	.478	2	2		
94	8¾	00.42	26 49.894	3.4353	−19 3 46.92	.427	2	2		
96	6	00.45	26 51.896	3.4408	−19 19 47.72	.424	2	2		
97	6¼	00.48	27 16.139	3.3843	−16 30 48.91	.396	2	2		
101	8¼	00.40	27 42.932	3.2540	− 9 46 18.02	.366	2	2		
104	6	00.41	27 48.800	3.0883	− 0 50 49.41	.358	2	2		
98	4	00.42	28 28.470	3.9845	−40 49 50.71	.313	2	2	Pr. Mo. −ˢ.005	−0″.04
102	6¼	00.38	28 33.467	3.6270	−27 42 36.60	.307	2	2		
106	5.0	00.41	28 42.633	3.2536	− 9 43 19.09	.297	4	4	Fund. 303.	
99	5¾	00.39	29 0.033	4.1159	−44 37 24.63	.276	2	2		
111	4.3	99.54	29 55.794	3.3461	−14 27 22.20	.213	2	2	Fund. B. J.	
116	4½	00.45	30 57.048	3.6338	−27 48 13.74	.141	2	2	Pr. Mo. −ˢ.003	−0″.01
113	5½	00.40	31 18.918	4.0399	−42 14 20.74	.115	2	2	Pr. Mo. −ˢ.019	+0″.11
118	6¾	00.42	31 28.461	3.5913	−25 56 56.29	.105	2	2		
120	6¾	00.37	32 10.873	3.6378	−27 52 38.45	.056	2	2		
125	7¼	00.39	32 25.259	3.3433	−14 12 3.20	.038	2	2	S. pr.	
123	5½	00.38	32 30.730	3.6765	−29 26 55.86	.033	2	2		
127	9¼	00.48	32 37.921	3.3350	−13 46 21.22	.024	2	2		
132	7	99.54	32 54.435	3.3434	−14 11 12.49	.005	2	2	N. fol. Pr. Mo. (?)	
133	5.8	00.41	33 9.052	3.4411	−18 58 21.42	11.988	2	2	Fund. 303.	
128	5¾	00.40	33 24.855	3.7985	−34 5 7.58	.970	2	2		
129	7¼	00.42	33 57.772	4.1211	−44 17 48.76	.931	2	2		
139	7¾	00.45	34 14.987	3.3355	−13 43 46.72	.910	2	2		
134	5¼	00.48	34 18.827	4.1235	−44 19 49.67	.905	2	2	Pr. Mo. −ˢ.016	−0″.29
138	5¾	00.41	34 22.086	3.5404	−23 29 35.29	.902	2	2		
144	7¼	00.37	35 41.822	3.3350	−13 38 52.33	.809	2	2		
141	6	00.39	36 8.211	3.8911	−37 6 14.09	.777	2	2		
145	5	99.54	36 10.956	3.4528	−19 21 17.24	.773	2	2	Pr. Mo. −ˢ.002	−0″.10
143	6¼	00.38	36 18.562	3.8136	−34 23 20.99	.765	2	2		
150	7½	00.42	37 8.688	3.3777	−15 41 34.26	.706	2	2	Dup. prec.	
149	7½	00.40	37 12.334	3.5812	−25 5 46.84	.702	2	2	Dup. S. fol.	
157	6.0	00.41	38 26.754	3.3720	−15 21 15.50	.613	2	2	Fund. 303.	
161	6½	00.39	40 20.911	3.8224	−34 22 9.29	.478	2	2		
166	5¾	00.40	40 55.197	3.1013	− 1 29 27.50	.436	2	2		
175	6¼	00.39	43 42.465	3.1407	− 3 30 43.63	.235	2	2		
178	3.3	99.54	44 24.019	3.1333	− 3 7 27.66	.184	2	2	Fund. B. J.	
178		00.45	23.992		27.22		4	4		
174	5	00.40	44 36.153	3.8026	−33 19 20.86	.170	2	2	Pr. Mo. −ˢ.002	−0″.03
180	7¾	00.37	44 43.121	3.1429	− 3 36 57.90	.162	2	2		
177	5½	00.38	44 57.742	3.6016	−25 26 50.63	.144	2	2		
186	5½	00.45	46 2.952	3.1270	− 2 47 16.37	.064	2	2		
190	5¼	00.48	47 31.649	3.4773	−19 52 5.41	10.957	2	2		

Star.	Mag.	Epoch.	R. A. 1900.0.	Precess.	Decl. 1900.0.	Precess.	No. Obs.		Notes.	
			h m s	s	° ′ ″	″				
P 189	5½	1900.42	15 47 36.367	+3.5956	−25 1 43.21	−10.950	2	2		
191	6	00.40	47 55.430	3.5773	−24 14 6.75	.927	2	2		
192	6	00.37	47 58.630	3.5644	−23 40 49.63	.924	2	2		
193	4	99.54	48 7.781	3.4036	−16 26 9.28	.913	2	2	Pr. Mo. +ˢ.007	+0″.12
195	6½	00.38	48 39.246	3.5952	−24 56 50.65	.873	2	2		
197	6½	00.45	49 13.494	3.4620	−19 5 16.14	.832	2	2		
196	6	00.42	49 27.315	3.6211	−25 58 16.34	.815	2	2		
199	6¼	00.40	49 56.260	3.7633	−31 29 35.56	.779	2	2		
204	6½	00.41	50 29.734	3.8249	−33 40 24.95	.738	2	2	S. pr.	
205	6¼	00.48	50 30.418	3.8249	−33 40 18.80	.737	2	2	N. fol.	
207	4½	00.45	50 42.483	3.6969	−28 55 19.48	.722	2	2	Pr. Mo. −ˢ.003	−0″.02
210	7	99.54	51 20.844	3.5115	−21 11 42.40	.675	2	2		
213	7	00.37	51 52.121	3.5593	−23 14 16.29	.636	2	2		
218	5.0	00.43	52 35.253	3.3556	−13 59 27.27	.583	4	4	Fund. 303.	
216	4	00.39	52 48.026	3.6226	−25 49 35.24	.568	2	2	Pr. Mo. −ˢ.003	−0″.04
217	5¼	00.40	53 29.657	3.9656	−38 6 38.36	.516	2	2		
227	7	00.41	54 19.599	3.2131	−7 1 1.97	.454	2	2		
225	2.3	99.56	54 25.055	3.5416	−22 20 13.76	.446	2	2	Fund. B. J.	
225		00.45	25.114		14.21		6	6		
228	5	99.54	54 42.765	3.4053	−16 14 19.83	.424	2	2	Pr. Mo. −ˢ.046	−0″.39
231	5¾	00.37	55 23.608	3.2361	−8 7 42.96	.374	2	2		
232	6	00.40	56 45.039	3.9802	−38 19 24.55	.271	2	2		
237	5¾	00.38	57 17.902	3.6233	−25 35 11.09	.230	2	2		
240	7¼	99.56	57 18.050	3.2387	−8 12 56.15	.230	2	2	S. pr.	
236	7¼	00.42	57 39.357	3.8837	−35 10 17.11	.204	2	2		
243	7¼	99.54	57 52.565	3.2387	−8 12 8.41	.187	2	2	N. fol.	
245	5	00.41	58 52.079	3.2992	−11 5 50.54	.112	2	2		
244	8¼	00.39	59 4.058	3.5075	−20 37 30.91	.095	2	2		
249	7	00.40	59 17.159	3.4541	−18 15 53.15	.080	2	2		
242	5½	00.45	59 25.373	4.2248	−44 54 6.28	.070	2	2	Pr. Mo. −ˢ.003	0″.00
251	2.0	99.55	59 37.185	3.4830	−19 31 54.41	.056	2	2	Fund. B. J.	
251		00.43	37.223		54.43		4	4		
252	5¾	99.56	59 37.627	3.4829	−19 31 41.60	.055	2	2	N. fol.	
254	7¼	00.38	59 56.182	3.4805	−19 24 28.86	.031	2	2		
248	4	00.48	16 0 1.428	3.9303	−36 31 49.02	.025	2	2	Pr. Mo. −ˢ.004	−0″.04
255	6	00.48	0 41.590	3.9304	−36 29 3.19	9.974	2	2	2d star.	
257	8¼	00.41	0 49.690	3.6753	−27 26 55.11	.964	2	2		
259	5	00.42	0 57.310	3.5043	−20 23 54.03	.954	2	2		
256	7¼	00.48	1 0.306	3.9300	−36 27 3.14	.950	2	2	3d star.	
263	4	99.54	1 32.328	3.5095	−20 35 55.09	.910	2	2	Pr. Mo. +ˢ.001	−0″.05
260	7½	00.45	1 52.216	4.0091	−38 50 14.64	.884	2	2	S. pr.	
261	7¼	00.49	1 52.491	4.0087	−38 49 29.32	.883	2	2	N. fol.	
264	7¼	00.41	1 58.708	3.6774	−27 27 46.05	.877	2	2		
265	5½	99.56	2 1.791	3.6417	−26 3 31.15	.873	2	2		
268	6.0	00.39	2 3.130	3.3302	−12 28 35.65	.870	2	2	Fund. 303.	
273	7½	99.55	3 15.102	3.4684	−18 43 46.40	.779	2	2		
271	6	00.42	3 27.836	3.8392	−33 16 48.91	.762	2	2		
275	8	00.46	3 32.363	3.4792	−19 11 31.04	.757	2	2		
278	7½	00.48	3 37.336	3.2359	−7 57 12.35	.751	2	2		
272	7¼	00.45	4 13.678	4.2454	−45 4 11.75	.705	2	2		
274	6¼	00.49	4 28.579	4.0850	−40 51 16.77	.684	2	2	Pr. Mo. (?)	
280	5¼	99.54	4 49.175	3.7262	−29 9 7.82	.659	2	2		
1	7½	99.56	5 23.832	3.2384	−8 2 16.70	.616	2	2		
287	6½	00.41	6 5.136	3.7016	−28 9 26.04	.562	2	2	3″ dup. S. pr.	
2	5½	00.42	6 8.503	3.6888	−27 40 1.49	.558	2	2		
3	7	00.48	6 9.793	3.4818	−19 11 24.77	.557	2	2	N. pr.	
4	4	99.55	6 10.823	3.4820	−19 12 2.66	.555	2	2	S. fol.	
6	5½	00.45	6 31.948	3.2760	−9 48 18.76	.527	2	2		
5	8¼	00.48	6 40.243	3.6951	−27 52 28.63	.517	2	2		
8	6	00.49	6 42.099	3.2442	−8 17 21.31	.514	2	2		

Star.	Mag.	Epoch.	R. A. 1900.0.	Precess.	Decl. 1900.0.	Precess.	No. Obs.		Notes.
			h m s	s	° ′ ″	″			
P 7	7½	1900.48	16 6 55.091	+3.4838	−19 14 41.29	−9.498	2	2	
10	6	99.54	7 47.555	3.5290	−21 8 40.60	.431	2	2	
15	5¼	99.56	8 18.900	3.3148	−11 34 57.65	.389	2	2	
16	7	99.57	8 21.584	3.2359	− 7 51 45.90	.387	2	2	
14	6½	00.42	8 49.746	3.6297	−25 13 24.61	.351	2	2	
17	7½	00.45	8 57.300	3.5537	−22 7 37.21	.341	2	2	
21	3.0	99.55	9 6.260	3.1438	− 3 26 13.18	.329	2	2	Fund. B. J.
26	5¾	00.49	10 11.061	3.2416	− 8 6 17.45	.246	2	2	Pr. Mo. +ˢ.014 −0″.51
28	6	99.54	11 8.330	3.5020	−19 51 20.47	.171	2	2	
31	5¼	99.56	12 5.680	3.7159	−28 21 55.00	.099	2	2	Pr. Mo. −ˢ.005 −0″.13
29	6	00.48	12 20.009	4.1623	−42 25 46.35	.077	2	2	
41	3.3	99.57	13 1.718	3.1656	− 4 26 55.98	.024	2	2	Fund. B. J.
41		00.48	1.730		56.30		2	2	
35	7¾	00.40	13 11.945	3.7807	−30 39 33.88	.011	2	2	N. pr.
36	6	00.45	13 13.124	3.7808	−30 39 51.36	.010	2	2	S. fol.
39	6¾	00.48	13 16.229	3.5069	−19 58 26.66	.004	2	2	
37	6	00.48	13 46.839	4.0475	−39 11 15.87	8.965	2	2	
44	8¼	00.45	14 12.952	3.5036	−19 48 9.42	.930	2	2	N. pr.
45	7¾	00.42	14 14.484	3.5040	−19 48 51.23	.929	2	2	S. fol.
46	5	99.56	14 37.006	3.6043	−23 55 42.76	.900	2	2	
48	7½	99.54	14 39.086	3.5059	−19 52 35.15	.896	2	2	S. pr.
49	8	99.58	14 39.420	3.5058	−19 52 23.07	.895	2	2	N. fol.
50	3½	99.57	15 6.499	3.6409	−25 21 10.31	.861	2	2	Pr. Mo. −ˢ.003 −0″.02
58	7¼	00.45	16 51.800	3.2527	− 8 30 18.73	.723	2	2	
55	6	99.57	17 14.761	4.0468	−38 57 32.66	.693	3	3	Pr. Mo. +ˢ.004 −0″.02
64	5.0	99.54	18 14.965	3.5074	−19 48 11.90	.613	2	2	Fund. 303.
64		00.48	15.017		11.85		2	2	
61	7½	99.56	18 21.184	3.6858	−26 55 5.58	.605	2	2	
60	7	99.57	18 22.812	3.7551	−29 28 12.80	.601	2	2	S. f. dup. P. M. +ˢ.004 −0″.11
67	8	00.42	19 23.543	3.7482	−29 10 12.98	.523	2	2	
68	6¾	00.45	19 24.384	3.5921	−23 13 47.09	.522	2	2	S. pr.
71	6	00.48	19 35.278	3.5920	−23 13 1.14	.507	2	2	N. fol.
72	7	00.49	19 35.363	3.5910	−23 10 29.88	.507	2	2	N. star of pair.
70	8	99.58	19 42.802	3.6722	−26 20 19.21	.498	2	2	
76	7¾	99.55	20 9.451	3.2832	− 9 51 18.46	.463	2	2	
80	5	99.54	21 13.579	3.4728	−18 13 45.76	.378	2	2	
83	5½	99.56	22 23.539	3.2470	− 8 8 52.19	.285	2	2	
84	1.3	99.58	23 16.465	3.6731	−26 12 36.48	.215	2	2	Fund. B. J.
84		00.45	16.474		37.00		2	2	
88	6¼	99.55	23 24.610	3.2420	− 7 54 18.09	.204	2	2	Pr. Mo. −ˢ.002 −0″.11
87	7	99.57	23 54.654	3.6402	−24 55 37.87	.164	2	2	S. pr.
87		00.42	54.609		38.07		1	1	
89	5¼	00.46	24 7.851	3.6396	−24 53 42.86	.147	3	3	N. fol.
90	6	99.54	24 39.669	3.9011	−34 6 53.80	.104	2	2	
92	5	00.48	24 50.809	3.9131	−34 29 11.92	.089	2	2	Pr. Mo. −ˢ.005 −0″.03
93	6¼	99.58	25 14.447	3.6783	−26 19 11.66	.056	2	2	
94	5.0	00.46	25 24.800	3.4330	−16 23 41.17	.044	4	4	Fund. 303.
98	7¼	99.56	25 54.008	3.2385	− 7 42 13.56	.004	2	2	
96	5	99.55	26 12.399	3.5497	−21 15 8.85	7.980	2	2	
101	7¼	00.45	26 55.919	3.4195	−15 46 14.38	.921	2	2	
95	6	99.57	26 58.528	4.2519	−43 49 59.46	.918	2	2	Pr. Mo. −ˢ.001 −0″.03
99	8	00.48	27 16.803	3.9438	−35 19 51.93	.894	2	2	
110	7¼	99.54	28 7.501	3.1598	− 4 2 56.93	.826	2	2	
104	7	99.56	28 37.759	3.9526	−35 30 53.87	.785	2	2	
115	7	99.55	29 8.829	3.2447	− 7 56 23.48	.743	2	2	
106	6½	99.57	29 20.448	4.2091	−42 39 7.33	.728	2	2	
113	3	00.42	29 39.362	3.7292	−28 0 31.01	.702	2	2	Pr. Mo. −ˢ.003 −0″.03
111	4½	00.45	29 47.579	3.9388	−35 2 58.72	.691	2	2	Colored.
119	6½	99.58	31 5.166	3.2610	− 8 38 58.09	.587	2	2	
121	5.8	99.54	31 6.159	3.1188	− 2 6 40.21	.587	2	2	Fund. 303.

Star.	Mag.	Epoch.	R. A. 1900.0.	Precess.	Decl. 1900.0.	Precess.	No. Obs.		Notes.
			h m s	s	° ′ ″	″			
P 121	.	1900.49	16 31 6.208	+3.1188	− 2 6 40.71	−7.587	2	2	Fund. 303 con.
117	6¼	00.48	31 21.701	4.2352	−43 11 47.69	.564	2	2	Pr. Mo. (?)
122	7½	99.57	31 27.778	3.2048	− 6 5 25.94	.556	2	2	
123	2.6	99.56	31 39.038	3.2993	−10 21 52.24	.540	2	2	Fund. B. J.
123		00.42	39.054		52.68		2	2	
128	6¾	99.55	32 40.524	3.4764	−18 1 10.01	.458	2	2	
138	7¼	99.54	34 11.681	3.2324	− 7 18 52.73	.334	2	2	
137	6¾	99.57	34 40.709	3.5312	−20 12 48.82	.295	2	2	
142	7	99.55	35 30.398	3.4746	−17 51 51.86	.227	2	2	
143	5.0	99.58	35 47.266	3.4672	−17 32 55.33	.204	2	2	Fund. 303.
143		00.48	47.237		55.56		2	2	
148	7	00.42	35 54.968	3.1305	− 2 39 4.38	.193	2	2	Pr. Mo. −ˢ.002 −0″.45
145	6½	00.45	36 0.886	3.5204	−19 43 58.04	.186	2	2	
150	6	99.57	37 46.962	4.1475	−40 39 5.24	.040	2	2	
157	8	99.54	37 49.008	3.6025	−22 56 27.73	.039	2	2	
159	6	99.57	38 44.836	3.7484	−28 19 24.27	6.961	2	2	
162	7	99.56	39 7.673	3.6051	−22 59 52.11	.931	2	2	
168	6¼	99.57	40 43.909	3.6684	−25 20 47.32	.799	2	2	
167	7¾	99.54	41 4.950	3.9062	−33 31 4.18	.769	2	2	
174	7	99.55	42 8.989	3.6431	−24 20 52.03	.681	2	2	
176	7½	99.56	42 46.667	3.9185	−33 50 20.26	.630	2	2	
185	6	99.58	43 39.091	3.6475	−24 27 54.27	.557	2	2	
184	3	99.61	43 41.137	3.9284	−34 6 40.56*	.553	2	2	Pr. Mo. −ˢ.051 −0″.26
179	7¼	00.42	43 53.560	4.1970	−41 39 25.72	.538	2	2	
183	7	00.45	43 58.402	4.0631	−38 4 57.51	.531	2	2	
191	5.0	99.57	44 18.001	3.3095	−10 36 22.28	.505	2	2	Fund. 303.
186	6	99.54	44 35.314	4.1747	−41 3 30.79	.480	2	2	
189	4	99.61	45 5.754	4.0574	−37 52 31.74	.439	2	2	Pr. Mo. −ˢ.002 −0″.03
196	7¼	99.55	45 10.568	3.4447	−16 22 28.22	.432	2	2	
188	7	00.48	45 18.303	4.2005	−41 41 5.18	.421	2	2	
190	6¼	99.58	45 30.863	4.1567	−40 33 8.78	.403	2	2	
193	4	99.56	45 33.622	4.0571	−37 50 48.76	.400	2	2	Pr. Mo. −ˢ.003 −0″.03
192	8	99.60	45 46.537	4.1987	−41 36 58.04	.382	2	2	
198	5	99.54	46 56.400	4.2236	−42 11 44.45	.285	2	2	
199	7	99.57	46 57.012	4.2089	−41 49 40.36	.284	2	2	
200	6¼	99.61	47 0.777	4.2014	−41 38 22.71	.280	2	2	1st star.
201	7½	99.60	47 2.497	4.2009	−41 37 30.27	.278	2	2	2d star.
202	7¼	00.42	47 8.878	4.2024	−41 39 33.59	.268	2	2	3d star.
203	7½	00.45	47 10.399	4.2035	−41 41 1.28	.266	2	2	4th star.
204	7½	00.48	47 18.519	4.2025	−41 39 16.02	.255	2	2	5th star.
205	6½	00.48	47 23.076	4.2291	−42 18 49.29	.248	2	2	
214	5½	99.58	47 30.901	3.5414	−20 14 53.89	.237	2	2	
206	5	00.49	47 32.753	4.2243	−42 11 24.43	.234	2	2	Red. Pr. Mo. −ˢ.015 −0″.24
211	7	99.56	47 54.906	3.9081	−33 18 34.64	.203	2	2	
209	7	99.60	48 0.887	4.2145	−41 55 35.49	.196	2	2	
215	6½	99.55	48 13.091	3.8196	−30 25 23.10	.178	2	2	
216	7	99.61	48 45.334	4.1160	−39 20 32.07	.134	2	2	
220	6¾	00.42	48 48.134	3.6222	−23 20 54.18	.130	2	2	
226	7¼	00.45	49 10.407	3.1618	− 4 0 3.71	.099	2	2	
227	5¼	00.48	49 14.953	3.2064	− 5 59 25.42	.092	2	2	
222	6¾	00.48	49 25.859	3.9110	−33 20 45.46	.078	2	2	Red.
218	6¼	99.57	49 38.347	4.1674	−40 39 47.65	.060	2	2	
230	7	00.49	49 45.719	3.2177	− 6 29 19.75	.051	2	2	
232	6	99.58	50 15.405	3.4541	−16 38 49.09	.009	2	2	
235	7	99.56	50 27.860	3.2059	− 5 57 42.91	5.992	2	2	
228	5¼	99.54	50 40.009	3.9047	−33 6 3.00	.974	2	2	
234	6.1	99.60	50 46.045	3 6142	−22 59 29.08	.966	2	2	Fund. 303.
234		00.42	46.055		29.79		2	2	
236	7	99.55	51 11.341	3.5220	−19 22 53.37	.931	2	2	N. fol.
237	5½	99.57	52 6.143	4.0525	−37 27 52.21	.854	2	2	

* Error + 2″ (?)

Star.	Mag.	Epoch.	R. A. 1900.0.	Precess.	Decl. 1900.0.	Precess.	No. Obs.		Notes.
			h m s	s	° ′ ″	″			
P 244	6¼	1899.56	16 53 0.285	+3.4089	−14 42 53.67	−5.779	2	2	
245	7¼	99.58	53 14.520	3.4316	−15 39 26.18	.759	2	2	
250	7¼	00.45	53 38.958	3.4380	−15 54 42.17	.726	2	2	
248	5¼	00.48	53 50.274	3.6687	−24 56 25.90	.709	2	2	
251	6¼	99.61	53 54.860	3.4914	−18 5 34.00	.703	2	2	Pr. Mo. s.000 −0″.18
249	5¼	00.49	54 1.943	3.6660	−24 50 12.38	.694	2	2	
254	8	99.55	54 21.480	3.4910	−18 3 42.57	.664	2	2	N. fol.
256	7¼	99.57	54 32.642	3.1640	−4 4 14.22	.650	2	2	
255	5	99.58	55 24.615	3.8749	−31 59 40.86	.577	2	2	Pr. Mo. −s.004 −0″.07
260	7	99.56	55 32.617	3.3789	−13 24 37.21	.566	2	2	Pr. Mo. − .001 −0 .38
263	5.0	99.61	55 47.094	3.1642	−4 4 21.18	.545	2	2	Fund. 303.
263		00.46	47.100		21.90		4	4	
259	7½	00.48	55 59.119	3.8792	−32 6 45.80	.529	2	2	
261	6¼	00.49	56 0.152	3.5086	−18 44 18.31	.527	2	2	
266	7½	00.51	56 12.433	3.2212	−6 35 22.92	.510	2	2	Pr. Mo. (?)
269	6¼	99.55	57 51.466	3.6886	−25 33 18.94	.371	2	2	
268	5	99.56	58 14.558	3.9413	−33 58 55.32	.339	2	2	
271	6¼	99.57	58 34.384	3.6877	−25 30 9.52	.311	2	2	
274	7¼	00.45	58 41.284	3.4755	−17 20 55.44	.301	2	2	Pr. Mo. −s.002 −0″.12
273	6	99.58	58 49.782	3.5511	−20 21 15.12	.290	2	2	
277	6¼	00.48	59 0.912	3.3222	−10 56 53.02	.273	2	2	
278	7¼	00.49	59 53.540	3.7149	−26 26 36.42	.200	2	2	
281	6	99.54	17 0 13.473	3.5795	−21 25 33.40	.174	2	2	
289	6	99.60	0 22.899	3.0897	−0 45 17.80	.158	2	2	
284	6¼	99.55	0 41.393	3.7136	−26 22 38.49	.132	2	2	
288	7½	99.56	0 46.330	3.3540	−12 16 33.41	.125	2	2	Pr. Mo. (?)
297	6	99.57	2 26.322	3.4804	−17 28 34.94	4.984	2	2	
299	7	99.58	2 50.563	3.3458	−11 54 8.51	.950	2	2	
303	6	99.55	3 4.039	3.0942	−0 56 50.92	.930	2	2	
300	8½	99.54	3 16.173	3.4799	−17 26 21.82	.913	2	2	
294	5½	00.48	3 27.476	4.3434	−44 25 45.48	.898	2	2	Pr. Mo. (?)
305	7½	00.45	4 21.836	3.5274	−19 18 35.11	.821	2	2	
306	2.3	99.56	4 38.492	3.4352	−15 36 4.12	.797	2	2	Fund. B. J.
306		00.49	.480		4.03		2	2	
302	4	00.48	4 59.443	4.2881	−43 6 28.21	.767	2	2	Pr. Mo. +s.001 −0″.29
309	6¾	99.57	5 18.112	3.5589	−20 31 32.23	.755	2	2	Pr. Mo. .000 −0 .16
308	7½	00.45	5 24.067	3.7226	−26 34 40.88	.732	2	2	
311	7	99.54	5 57.571	3.7326	−26 54 1.88	.685	2	2	S. pr.
1	8½	99.55	6 22.762	3.7324	−26 53 50.55	.650	2	2	N. fol.
6	6¼	99.56	8 0.481	3.7325	−26 51 52.73	.511	2	2	
9	5¾	99.57	8 45.329	3.9333	−33 25 57.10	.447	2	2	
14	6¾	99.58	8 55.975	3.5694	−20 51 10.44	.432	2	2	
12	8½	99.60	9 5.513	3.7618	−27 51 14.48	.418	2	2	
17	5¾	99.55	9 11.796	3.7216	−26 27 20.54	.410	2	2	S. Pr. Mo. −s.039 −1″.18
17	6	99.61	9 11.889	3.7216	−26 27 16.19	.410	2	2	N. Pr. Mo. − .039 −1 .18
10	6¾	00.48	9 16.291	3.9400	−33 37 21.19	.403	2	2	
21	6¼	99.54	10 4.410	3.7205	−26 24 6.31	.333	2	2	Pr. Mo. −s.038 −1″.14
23	5¼	99.56	10 33.250	3.9062	−32 32 58.91	.293	2	2	Pr. Mo. − .009 −0 .05
27	6¾	99.58	11 26.643	3.7249	−26 31 7.22	.218	2	2	
34	5.0	99.59	11 28.557	3.0803	−0 19 56.39	.215	4	4	Fund. 303.
34		00.49	.583	3.0803	57.34	.215	2	2	
28	6	99.60	11 49.616	3.9038	−32 26 39.97	.185	2	2	
31	7½	00.45	11 54.656	3.6596	−24 10 30.48	.178	2	2	N. star.
32	5¼	00.48	11 54.706	3.6597	−24 10 41.38	.178	2	2	S. star.
33	6¼	99.55	12 0.614	3.6539	−23 57 45.04	.169	2	2	Pr. Mo. +s.006 −0″.12
45	6¾	99.54	13 37.556	3.1346	−2 42 10.77	.031	2	2	Pr. Mo. − .011 −0 .07
43	6¼	99.57	14 4.017	3.4896	−17 39 6.14	3.992	2	2	2″ dup. mean.
46	7¼	99.56	14 7.713	3.1332	−2 38 40.27	.988	2	2	
41	7	99.60	14 17.978	3.7245	−26 26 48.05	.972	2	2	
47	5.0	99.55	15 0.525	3.5761	−21 0 19.61	.912	2	2	Fund. 303.

Star.	Mag.	Epoch.	R. A. 1900.0.	Precess.	Decl. 1900.0.	Precess.	No. Obs.		Notes.
			h m s	s	° ′ ″	″			
P 52	4½	1899.61	17 15 12.117	+3.3693	−12 44 43.26	−3.896	2	2	
48	7	99.58	15 13.216	3.7237	−26 23 59.86	.893	2	2	
55	7¾	00.45	15 22.516	3.3751	−12 59 0.43	.881	2	2	
51	6	00.48	15 33.493	3.6790	−24 48 18.10	.865	2	2	
53	3.4	99.60	15 52.033	3.6818	−24 53 59.47	.838	2	2	Fund. B. J.
57	8¼	00.49	16 1.850	3.6426	−23 28 29.01	.825	2	2	
63	7¾	99.58	16 46.122	3.4894	−17 36 21.03	.760	3	3	
54	6	00.45	16 58.135	4.3439	−44 4 1.00	.743	2	2	
62	7½	99.56	17 0.797	3.6852	−25 0 4.10	.740	2	2	
60	5	99.57	17 3.914	3.7724	−28 2 44.70	.736	2	2	
67	7½	99.58	17 22.379	3.5342	−19 21 9.59	.709	2	2	
70	6¾	99.55	17 58.015	3.6511	−23 44 58.44	.657	2	2	
79	7¼	00.48	18 29.081	3.2872	−9 15 50.64	.614	2	2	
76	5½	99.60	18 43.087	3.5868	−21 20 53.25	.592	2	2	
77	6¼	00.45	18 59.481	3.6626	−24 9 8.74	.570	2	2	
73	6¼	99.57	19 28.926	4.4237	−45 45 10.01	.528	2	2	3″ dup. mean.
82	7½	99.57	19 49.748	3.7582	−27 30 31.31	.498	4	3	
83	5	99.56	20 15.673	3.6612	−24 5 0.44	.460	2	2	Pr. Mo. −ˢ.003 −0″.12
88	6¾	00.48	20 43.268	3.5884	−21 22 52.75	.420	2	2	S. pr.
89	8¼	00.50	20 44.646	3.5870	−21 19 33.65	.419	3	3	N. fol.
86	5½	00.45	20 58.041	3.8265	−29 46 36.27	.399	2	2	Pr. Mo. ˢ.000 −0″.15
91	7¾	99.55	21 2.071	3.4268	−15 2 28.37	.393	2	2	
90	6	99.60	21 14.906	3.8225	−29 38 15.33	.374	2	2	
99	4.5	99.58	21 19.420	3.1880	−4 59 53.80	.369	2	2	Fund. 303.
98	6	99.57	21 25.260	3.3631	−12 25 27.13	.360	2	2	
100	7¼	99.56	22 28.421	3.6998	−25 25 35.84	.269	2	2	
107	8½	99.54	22 59.452	3.2916	−9 25 2.02	.225	2	2	
110	7½	99.58	23 45.967	3.3034	−9 54 35.04	.157	2	2	2″ dup. mean.
106	3	99.57	23 57.845	4.0755	−37 12 57.89	.141	2	2	Pr. Mo. −ˢ.003 −0″.04
113	7½	99.60	24 43.985	3.6541	−23 45 48.60	.073	2	2	
114	7¾	00.45	24 44.086	3.4405	−15 33 26.31	.073	2	2	
118	7¾	99.56	24 58.406	3.3061	−10 1 2.41	.053	2	2	
115	5.1	00.48	25 18.865	3.6579	−23 53 7.95	.024	2	2	Fund. 303.
117	6¼	00.49	25 31.774	3.7229	−26 11 35.45	.006	2	2	
122	7	99.58	25 48.438	3.1362	−2 44 59.91	2.981	2	2	
126	8¼	99.54	26 14.199	3.1295	−2 27 37.65	.944	2	2	Pr. Mo. −ˢ.019 −0″.11
121	2	99.57	26 49.077	4.0707	−37 1 51.81	.893	2	2	Pr. Mo. − .003 −0 .04
129	8	00.45	27 6.308	3.4203	−14 43 7.67	.869	2	2	
128	7	99.60	27 9.904	3.4880	−17 25 25.86	.865	2	2	
131	7½	99.56	27 33.345	3.6101	−22 6 1.06	.830	2	2	
134	7	99.58	27 58.876	3.6331	−22 57 34.00	.794	2	2	
125	5½	00.48	28 12.854	4.4648	−46 26 13.90	.772	2	2	
140	6½	99.57	29 17.425	3.6074	−21 58 35.40	.679	2	2	
142	7¼	99.55	29 26.389	3.6782	−24 33 34.04	.666	2	2	
137	5	99.60	29 39.555	4.1286	−38 33 52.28	.648	2	2	Pr. Mo. (?)
138	3	99.56	30 7.902	4.3059	−42 56 2.18	.607	2	2	Pr. Mo. −ˢ.002 −0″.01
145	6¼	99.58	30 57.933	4.3015	−42 49 3.81	.533	2	2	
152	7¼	99.61	31 9.366	3.5275	−18 55 38.97	.518	2	2	
157	3.6	99.57	31 51.548	3.4366	−15 20 8.36	.456	2	2	Fund. B. J.
157		00.47	51.600		8.58		6	6	
156	6	99.60	31 51.839	3.4410	−15 30 35.87	.456	2	2	
161	4.6	99.54	32 24.527	3.2606	−8 3 28.63	.409	2	2	
160	5¾	99.55	32 44.288	3.6051	−21 51 12.31	.380	2	2	
159	7¼	99.56	33 6.196	3.9108	−32 15 45.41	.348	2	2	
162	6½	99.58	33 29.986	3.9071	−32 8 40.45	.315	2	2	
170	7¾	99.61	33 54.389	3.3360	−11 12 37.14	.279	2	2	
167	7½	99.57	34 27.436	3.9080	−32 9 36.30	.231	2	2	
173	8	99.60	34 43.782	3.6583	−23 46 56.41	.206	2	2	
182	6¾	00.48	34 48.986	3.0863	−0 35 2.88	.200	2	2	
172	8	00.45	35 7.188	3.9051	−32 3 34.18	.173	2	2	Var. (?)

Star.	Mag.	Epoch.	R. A. 1900.0.	Precess.	Decl. 1900.0.	Precess.	No. Obs.		Notes.
			h m s	s	° ′ ″	″			
P 174	3½	1899.56	17 35 34.117	+4.1483	−38 58 41.33	−2.134	2	2	Pr. Mo. −ˢ.003 −0″.01
184	4.6	99.58	35 47.617	3.3753	−12 49 18.79	.115	4	4	Fund. 303.
187	8¼	99.54	35 55.106	3.1039	− 1 20 38.91	.103	2	2	
179	5¼	99.58	36 3.666	4.0708	−36 53 41.80	.092	2	2	
188	7	99.60	36 55.685	3.4418	−15 30 36.87	.016	2	2	
186	6½	99.57	36 59.945	3.7751	−27 50 8.65	.010	2	2	
192	5	00.48	37 26.220	3.6004	−21 38 4.58	1.971	2	2	
195	6½	99.56	38 22.101	3.6145	−22 8 59.24	.890	2	2	
202	6¼	99.58	38 23.190	3.2359	− 7 2 0.45	.888	2	2	
197	8¼	99.55	38 40.458	3.6099	−21 58 43.89	.864	2	2	
208	7½	99.54	39 46.449	3.7492	−26 55 51.30	.768	2	2	
210	4	99.57	40 35.382	4.1939	−40 5 18.29	.697	2	2	Pr. Mo. −ˢ.001 0″.00
217	5	99.56	41 15.873	3.7750	−27 47 33.43	.638	2	2	Var. Pr. Mo. −ˢ.002 −0″.02
221	7	99.58	41 36.091	3.5075	−18 4 10.16	.608	2	2	
223	6¼	99.55	42 12.590	3.7501	−26 56 21.13	.556	2	2	
227	5	99.60	42 40.687	3.8950	−31 40 7.86	.515	2	2	
231	7	99.54	42 50.677	3.8599	−30 33 45.35	.501	2	2	
229	4	00.48	43 3.098	4.0777	−37 0 42.64	.483	2	2	Pr. Mo. +ˢ.002 +0″.02
240	7	99.62	43 7.639	3.1140	− 1 46 25.35	.476	2	2	Var. (?)
228	5¾	00.49	43 11.500	4.1937	−40 3 29.53	.470	2	2	
238	7	99.56	44 5.769	3.7531	−27 1 46.56	.391	2	2	
236	5¾	99.58	44 30.578	4.2216	−40 44 31.02	.355	2	2	
243	7	99.60	44 46.337	3.8593	−30 31 39.54	.332	2	2	N. fol.
247	7	99.55	45 3.552	3.6359	−22 53 23.64	.307	2	2	
249	7¼	00.48	45 33.254	3.6570	−23 38 59.45	.263	2	2	
245	5¾	99.62	45 33.559	3.9990	−34 46 18.68	.263	2	2	S. fol. Var. (?)
248	6½	00.49	45 41.014	3.9859	−34 23 23.59	.252	2	2	
251	7½	99.64	45 48.653	3.5517	−19 44 55.35	.242	2	2	
253	7	99.54	45 53.736	3.5451	−19 29 45.58	.234	2	2	
250	6½	99.57	46 11.412	3.9758	−34 5 21.71	.208	2	2	
257	7¼	99.62	46 25.751	3.5347	−19 5 42.82	.188	3	3	
254	6	99.56	46 42.949	4.0027	−34 52 14.04	.162	2	2	
256	6½	99.58	47 5.382	3.9991	−34 45 45.45	.130	2	2	S. prec.
258	6½	99.60	47 14.728	3.9980	−34 43 46.65	.116	2	2	N. fol.
263	8¼	99.64	47 28.891	3.5285	−18 51 9.96	.096	2	2	
265	6¼	00.48	47 30.167	3.3292	−10 52 30.14	.093	2	2	
264	7	99.55	47 51.383	3.5550	−19 51 52.97	.062	2	2	
270	6¼	99.61	48 33.354	3.3399	−11 18 58.61	.001	2	2	
267	6	99.57	48 44.688	3.6916	−24 52 1.98	0.985	2	2	
274	6¾	99.62	48 52.661	3.1100	− 1 35 53.02	.974	2	2	
268	8½	99.54	48 56.235	3.6384	−22 57 41.61	.968	2	2	
276	7	99.58	49 20.757	3.3472	−11 36 49.95	.933	2	2	N. pr. dup.
277	6.2	99.59	50 1.997	3.5270	−18 47 4.42	.872	4	4	Fund. 303.
269	6¾	99.64	50 2.831	4.2737	−41 57 46.74	.872	2	2	
279	7	99.60	50 20.094	3.6107	−21 56 20.31	.847	2	2	
281	6¼	99.61	50 33.826	3.4505	−15 47 40.42	.827	2	2	
272	5	00.48	50 41.426	4.2629	−41 42 9.34	.815	2	2	
275	7	00.49	50 51.826	4.2725	−41 55 48.03	.800	2	2	
283	6¾	99.55	51 0.749	3.6654	−23 55 29.41	.787	2	2	
284	7¼	99.57	51 3.172	3.4474	−15 40 8.84	.783	2	2	
293	5¼	99.58	51 30.849	3.1677	− 4 4 2.97	.744	2	2	
290	8	99.64	51 33.011	3.5308	−18 55 30.47	.741	2	2	Pr. Mo. (?)
294	6¼	99.54	52 39.925	3.8517	−30 14 33.96	.643	2	2	N. pr.
297	7¼	99.60	52 54.153	3.4773	−16 50 48.01	.621	2	2	
303	3.6	99.58	53 31.234	3.3026	− 9 45 41.03	.567	2	2	Fund. B. J.
299	5	99.61	53 41.171	3.6623	−23 48 24.38	.553	2	2	
305	7	99.57	53 45.314	3.1905	− 5 2 19.14	.547	2	2	
304	6¼	00.49	54 3.177	3.5679	−20 19 54.23	.521	2	2	
302	6½	00.50	54 3.670	3.6754	−24 16 34.26	.521	3	3	
307	6	99.64	54 18.068	3.1852	− 4 48 40.46	.499	2	2	

Star.	Mag.	Epoch.	R. A. 1900.0.	Precess.	Decl. 1900.0.	Precess.	No. Obs.		Notes.
			h m s	s	° ′ ″	″			
P 313	4½	1899.60	17 55 11.946	+3.1588	− 3 41 1.73	−0.421	2	2	Pr. Mo. (?)
308	8¼	99.55	55 12.148	3.5087	−18 4 7.16	.420	2	2	
311	6	99.61	55 34.473	3.4852	−17 9 10.42	.388	2	2	
310	7¼	00.48	55 37.416	3.6162	−22 7 42.62	.383	2	2	
312	6	99.54	55 50.830	3.6340	−22 46 39.41	.365	2	2	
317	7¼	99.57	55 58.579	3.5357	−19 6 12.98	.353	2	2	
320	6¾	99.64	56 27.810	3.6375	−22 54 15.78	.311	2	2	
319	7	99.58	56 30.962	3.6750	−24 15 15.92	.306	2	2	S. pr.
323	6	99.65	56 39.280	3.5788	−20 44 11.69	.293	2	2	
321	6	00.50	56 43.393	3.6757	−24 16 54.15	.287	3	3	
326	6¼	99.62	56 58.364	3.6324	−22 43 6.99	.265	2	2	
—	(8)	00.49	57 10.325	3.7340	−26 19 12.82	.248	1	1	C. G. C. 24538
325	7	99.60	57 31.440	3.9762	−34 3 18.35	.217	2	2	
330	8	99.59	57 33.418	3.6440	−23 8 22.00	.214	3	3	
337	6	99.64	57 38.108	3.2649	− 8 10 48.79	.207	2	2	3″ dup. mean.
332	6¼	00.48	57 44.592	3.6781	−24 21 46.26	.198	2	2	S. pr.
333	6¾	00.49	57 49.089	3.6767	−24 18 53.81	.192	2	2	N. fol.
334	7	99.62	57 52.226	3.6357	−22 50 22.81	.188	2	2	
338	8¼	99.57	58 6.346	3.5451	−19 27 40.94	.166	2	2	
339	5	99.58	58 37.932	3.8316	−29 35 4.33	.121	2	2	Var.
342	7	99.54	59 2.535	3.6792	−24 24 13.44	.084	2	2	Neb.
343	3.3	99.64	59 22.992	3.8578	−30 25 30.95	.054	6	5	Fund. B. J.
341	5½	99.61	59 35.985	4.3382	−43 25 45.72	.035	2	2	
351	7¼	99.55	18 0 26.251	3.7947	−28 22 19.40	+0.038	2	2	
346	8¼	99.64	0 26.568	4.3369	−43 24 7.06	.038	2	2	
357	6	99.57	0 40.492	3.2685	− 8 19 54.15	.058	2	2	
348	6¼	99.65	1 5.530	4.4464	−45 46 41.33	.095	2	2	
356	6¼	99.58	1 11.460	3.5981	−21 27 14.83	.104	2	2	
355	7¾	99.56	1 35.024	3.8764	−31 0 48.29	.139	2	2	Prec. 16ˢ
360	7¾	99.64	1 41.604	3.6094	−21 52 19.47	.147	2	2	
359	5	99.62	1 44.929	3.7976	−28 28 5.05	.152	2	2	
354	7	99.61	2 27.635	4.4076	−44 57 33.09	.214	2	2	
364	6½	99.60	2 38.648	3.5983	−21 27 48.36	.230	2	2	
365	7¾	99.54	3 2.350	3.7282	−26 7 19.92	.265	2	2	Pr. Mo. −ˢ.004 −0″.34
366	7	99.57	3 10.789	3.6680	−24 0 12.98	.277	2	2	
378	6¾	99.58	3 24.934	3.1410	− 2 55 20.33	.297	2	2	
367	5¾	99.55	3 38.861	3.8678	−30 44 40.20	.318	2	2	Dup. S. star.
361	5¼	99.62	3 48.482	4.4556	−45 58 18.66	.332	2	2	Pr. Mo. −ˢ.004 −0″.04
375	8	99.56	4 0.538	3.6620	−23 47 24.72	.350	2	2	S. star.
377	7¼	99.61	4 20.846	3.7261	−26 3 2.95	.379	2	2	
383	6¾	99.60	4 53.328	3.7183	−25 46 56.28	.427	2	2	
386	5½	99.65	5 37.136	3.6600	−23 43 17.44	.491	2	2	
7	4.0	99.59	7 46.932	3.5879	−21 5 6.22	.681	4	4	Fund. B. J.
8	6	99.56	8 15.434	3.6054	−21 44 23.16	.722	2	2	
5	6	99.65	8 35.543	4.3735	−44 14 12.34	.751	2	2	
12	8¼	99.57	8 59.440	3.6682	−24 1 38.12	.786	2	2	
9	7½	99.60	9 5.766	3.9442	−33 7 16.36	.795	2	2	
14	5¼	99.61	9 14.941	3.5790	−20 45 28.65	.808	2	2	
15	6	99.64	9 15.866	3.5699	−20 25 4.12	.809	2	2	
16	6¾	99.62	10 25.452	4.1240	−38 12 41.17	.911	2	2	
20	6¾	99.55	10 37.884	3.5740	−20 34 38.39	.929	2	2	
17	4	99.56	10 51.615	4.0713	−36 47 29.86	.950	2	2	Pr. Mo. −ˢ.014 −0″.16
21	6½	99.57	11 3.476	3.7922	−28 19 9.85	.966	2	2	Pr. Mo. + .009 −0 .20
25	6	99.54	11 36.547	3.5194	−18 29 55.25	1.014	2	2	
26	7¼	99.58	11 44.868	3.5509	−19 42 28.51	.026	2	2	
24	4¾	99.60	11 47.593	3.7553	−27 4 43.91	.031	2	2	
22	7¼	99.61	11 50.459	4.0883	−37 15 39.80	.035	2	2	
27	7	99.62	12 29.507	3.3633	−12 16 47.07	.092	2	2	
29	8	99.56	13 16.234	3.4730	−16 41 45.17	.160	2	2	
28	7	99.55	14 18.995	4.1556	−39 3 51.09	.252	2	2	

Star.	Mag.	Epoch.	R. A. 1900.0.	Precess.	Decl. 1900.0.	Precess.	No. Obs.		Notes.
			h m s	s	° ′ ″	″			
P 32	3½	1899.57	18 14 35.542	+3.8384	−29 52 14.27	+1.275	2	2	Pr. Mo. +ˢ.001 −0″.03
33	7	99.54	14 49.169	3.8738	−30 59 5.46	.295	2	2	
34	5	99.60	15 24.866	4.1414	−38 42 7.63	.348	2	2	
38	7¾	99.66	15 28.240	3.4658	−16 25 12.01	.352	2	2	S. pr.
40	8¼	99.64	15 32.957	3.4657	−16 25 6.90	.358	2	2	N. fol.
43	7½	99.58	16 2.402	3.4645	−16 22 13.57	.402	2	2	
37	6	99.62	16 6.547	4.0673	−36 42 58.03	.408	2	2	
41	7¾	99.61	16 7.332	3.7359	−26 27 46.85	.409	2	2	Prec. of 3 stars.
48	3.0	99.62	16 8.079	3.1408	−2 55 29.43	.411	4	4	Fund. B. J.
36	7½	99.65	16 21.483	4.2890	−42 22 10.46	.429	2	2	
42	6	99.57	16 43.735	4.0516	−36 17 12.49	.461	2	2	
39	6	99.62	17 1.797	4.3673	−44 9 34.81	.487	2	2	
44	7	99.60	17 25.533	3.9848	−34 23 2.37	.522	2	2	N. pr.
46	3	99.55	17 32.074	3.9864	−34 25 55.10	.533	2	2	Pr. Mo. −ˢ.005 −0″.14
52	5	99.54	18 35.788	3.8672	−30 48 27.21	.626	2	2	Pr. Mo. (?)
59	7¾	99.58	18 39.435	3.1006	−1 11 51.77	.630	2	2	
58	5	99.56	19 23.666	3.5733	−20 35 42.95	.694	2	2	3″ dup. S. f.
50	4½	99.57	19 33.557	4.4531	−46 1 23.20	.708	2	2	Pr. Mo. −ˢ.004 −0″.06
60	7	99.58	20 56.433	3.9529	−33 28 10.91	.829	2	2	
66	4	99.57	21 47.953	3.7068	−25 28 36.99	.904	2	2	Pr. Mo. −ˢ.005 −0″.18
68	8	99.54	22 47.084	3.6960	−25 6 17.93	.989	2	2	Dup. mean. 8½. 8½.
—	8½	99.58	23 7.270	3.9555	−33 34 19.15	2.019	1	1	C. G. C. 25210.
75	6½	99.61	23 11.859	3.7020	−25 19 12.76	.025	2	2	
69	7¾	99.59	23 24.722	3.9567	−33 36 44.97	.044	3	3	2′ S. fol. 17ˢ
71	8	99.62	23 26.699	3.9549	−33 33 35.95	.047	2	2	3′ N. fol. 2ˢ
72	7¼	99.64	23 27.729	3.9400	−33 6 46.04	.048	2	2	
70	5¾	99.65	23 56.411	4.2690	−41 58 46.60	.090	2	2	
81	8½	99.57	24 17.348	3.6682	−24 7 45.45	.121	2	2	
82	6	99.66	24 19.136	3.5250	−18 47 32.72	.124	2	2	Pr. Mo. (?)
73	5¼	99.68	24 20.994	4.4484	−45 59 54.54	.126	2	2	
86	6	99.61	24 28.676	3.1203	−2 2 59.62	.137	2	2	
79	6	99.62	24 31.235	3.9377	−33 3 19.05	.141	2	2	
76	5¾	99.64	24 38.157	4.4407	−45 49 32.10	.151	2	2	
88	6¾	99.56	25 27.014	3.5295	−18 58 19.58	.222	2	2	Pr. Mo. −ˢ.011 −0″.22
91	7¼	99.58	25 32.114	3.5129	−18 19 54.16	.229	2	2	Var.
92	5¾	99.60	25 34.665	3.5164	−18 28 16.48	.232	2	2	
87	7¾	99.54	25 50.170	3.9356	−33 0 33.54	.255	2	2	
94	6½	99.65	25 59.915	3.5351	−19 11 42.08	.269	2	2	Var.
85	5	99.66	26 21.757	4.2847	−42 23 4.01	.300	2	2	Pr. Mo. ˢ.000 −0″.03
90	6¼	99.68	26 29.296	4.1403	−38 47 51.07	.312	2	2	S. star.
89	7	99.57	26 29.358	4.1401	−38 47 31.06	.312	2	2	N. star.
95	6¾	99.55	26 36.115	3.5311	−19 2 38.60	.322	2	2	
104	6¼	99.61	26 47.126	3.0976	−1 4 26.14	.338	2	2	
101	5¾	99.62	27 0.688	3.4269	−14 56 16.71	.357	2	2	
99	6½	99.64	27 7.584	3.6688	−24 10 57.29	.367	2	2	
102	6¾	99.65	27 18.613	3.5154	−18 26 29.69	.383	2	2	
96	6	99.66	27 24.119	3.9377	−33 5 26.17	.392	2	2	S. pr.
—	7½	99.58	27 28.668	3.6677	−24 8 52.96	.399	2	2	C. G. C. 25334
97	7½	99.68	27 31.687	3.9358	−33 2 7.75	.402	2	2	N. fol.
103	7¼	99.60	27 40.721	3.6691	−24 11 51.76	.415	2	2	S. fol. 3d star.
105	5½	99.56	27 46.936	3.6665	−24 6 24.99	.425	2	2	
107	6½	99.62	27 56.258	3.4265	−14 55 40.58	.438	2	2	
108	6¾	99.64	28 25.685	3.6716	−24 17 55.20	.480	2	2	
109	7¼	99.65	28 53.443	3.9330	−32 58 8.20	.520	2	2	
111	7	99.60	29 19.922	3.4797	−17 3 48.53	.559	2	2	
110	6½	99.61	29 23.218	3.5795	−20 55 7.35	.564	2	2	
114	5.8	99.58	29 28.904	3.3318	−11 3 18.62	.571	4	4	Fund. 303.
112	6¼	99.55	29 29.714	3.5382	−19 20 47.79	.573	2	2	
115	5	99.58	29 45.842	3.2664	−8 18 50.57	.596	2	2	Pr. Mo. −ˢ.001 −0″.32
123	7	99.66	30 44.664	3.2312	−6 49 21.25	.681	2	2	

Star.	Mag.	Epoch.	R. A. 1900.0.	Precess.	Decl. 1900.0.	Precess.	No. Obs.		Notes.
			h m s	s	° ′ ″	″			
P 117	8¼	1899.56	18 30 48.710	+3.8168	−29 19 10.36	+2.687	2	2	
120	7¾	99.68	30 53.345	3.4850	−17 17 19.00	.694	2	2	
118	7½	99.61	30 55.245	3.8239	−29 33 22.22	.697	2	2	
121	6½	99.62	31 13.514	3.5363	−19 17 31.06	.724	2	2	
125	6¼	99.64	31 55.130	3.5937	−21 28 49.76	.784	2	2	
122	7¼	99.65	31 56.075	3.9511	−33 33 51.83	.785	2	2	
128	6½	99.57	32 3.093	3.4854	−17 18 56.82	.795	2	2	
130	7½	99.58	32 17.395	3.2451	− 7 25 9.19	.815	2	2	
129	6.1	99.60	32 25.767	3.6461	−23 35 24.71	.827	6	6	Fund. 303.
131	6	99.54	32 55.597	3.5841	−21 8 4.23	.869	2	2	Pr. Mo. −ˢ.006 −0″.18
138	6¼	99.56	34 1.730	3.1198	− 2 2 21.97	.965	2	2	
136	7½	99.58	34 35.241	3.8549	−30 37 10.40	3.014	2	2	
140	7½	99.57	35 12.988	3.4168	−14 35 52.16	.068	2	2	
141	6	99.55	35 45.647	3.6587	−23 55 35.72	.115	2	2	
144	6½	99.54	36 0.691	3.4181	−14 39 29.93	.137	2	2	
149	5	99.56	36 47.869	3.2852	− 9 8 53.42	.204	2	2	
152	6¼	99.60	36 53.305	3.2449	− 7 25 58.76	.213	2	2	
142	5¼	99.58	36 55.393	4.1193	−38 25 10.37	.216	2	2	Pr. Mo. −ˢ.003 −0″.05
146	5½	99.61	37 37.502	4.0218	−35 44 24.71	.277	2	2	
147	6	99.64	38 0.430	4.1709	−39 47 10.68	.310	2	2	N. pr.
148	7½	99.65	38 2.571	4.1729	−39 50 43.10	.312	2	2	S. fol.
157	5.0	99.62	38 4.452	3.2668	− 8 22 26.53	.315	6	6	Fund. 303.
158	6¼	99.66	38 7.286	3.2690	− 8 27 59.59	.320	2	2	
155	5¾	99.55	38 40.746	3.6904	−25 6 40.11	.367	2	2	
159	4	99.54	39 24.520	3.7465	−27 5 37.08	.430	2	2	
162	6½	99.56	40 6.852	3.5443	−19 42 38.00	.491	2	2	
168	8¼	99.57	40 11.824	3.1494	− 3 20 4.78	.498	2	2	
164	6	99.61	40 18.753	3.6178	−22 29 48.88	.508	2	2	
171	7½	99.60	40 40.123	3.2193	− 6 21 25.05	.539	2	2	
161	5¾	99.65	40 45.188	4.1970	−40 30 44.78	.547	2	2	
176	6½	99.62	41 18.711	3.0972	− 1 4 1.82	.594	2	2	N. pr.
166	6¼	99.66	41 37.536	4.3331	−43 47 19.77	.621	2	2	Pr. Mo. −ˢ.001 0″.00
177	4.6	99.62	41 52.090	3.1844	− 4 51 17.88	.643	6	6	Fund. 303.
175	7	99.55	41 56.366	3.5611	−20 22 58.06	.649	2	2	
169	6¼	99.56	42 23.393	4.3216	−43 32 39.92	.687	2	2	
180	8	99.54	42 54.964	3.5576	−20 15 51.44	.733	2	2	
185	5	99.57	43 44.070	3.5619	−20 26 17.82	.803	2	2	
197	6¼	99.61	44 19.838	3.2112	− 6 1 33.61	.853	3	3	
191	7	99.58	44 23.987	3.7378	−26 53 4.50	.860	2	2	
194	8	99.55	44 39.060	3.6128	−22 22 53.51	.881	2	2	
196	6.3	99.61	44 49.839	3.6100	−22 16 36.06	.896	6	6	Fund. 303.
201	6	99.64	45 28.341	3.3012	− 9 53 25.52	.952	2	2	
204	8¼	99.57	45 46.072	3.2196	− 6 23 45.14	.978	2	2	
205	6¾	99.65	45 50.744	3.1500	− 3 22 35.15	.983	2	2	
206	6	99.60	46 7.022	3.1513	− 3 26 5.48	4.006	2	2	
202	6	99.54	46 7.977	3.6030	−22 2 19.54	.008	2	2	
208	8	99.58	47 4.356	3.5295	−19 14 22.40	.089	2	2	
210	5½	99.55	48 1.537	3.5873	−21 28 55.99	.170	2	2	
211	5	99.56	48 7.938	3.6242	−22 52 5.06	.179	2	2	
218	2.3	99.61	49 3.873	3.7218	−26 25 15.30	.260	8	8	Fund. B. J.
219	5	99.61	49 4.409	3.6217	−22 47 46.40	.260	2	2	
217	6¾	99.57	49 5.481	3.8069	−29 20 20.53	.262	2	2	
222	6	99.62	49 53.679	4.0732	−37 28 14.97	.330	2	2	
225	6	99.58	49 57.405	3.6349	−23 18 3.82	.336	2	2	
228	7¾	99.56	50 30.951	3.6338	−23 16 29.70	.383	2	2	
231	5¼	99.55	51 23.907	3.5675	−20 47 13.23	.460	2	2	
240	5	99.57	51 42.406	3.2091	− 5 58 33.77	.485	2	2	
233	4	99.60	51 45.865	3.5791	−21 14 17.20	.491	2	2	Pr. Mo. +ˢ.001 −0″.01
230	5	99.58	51 58.750	4.0628	−37 14 15.53	.508	2	2	Pr. Mo. − .015 −0 .10
238	7¼	99.54	52 14.840	3.5611	−20 33 23.83	.531	2	2	

Star.	Mag.	Epoch.	R. A. 1900.0.	Precess.	Decl. 1900.0.	Precess.	No. Obs.		Notes.
			h m s	s	° ′ ″	″			
P 246	7¼	1899.56	18 53 43.430	+3.7695	−28 11 13.49	+4.657	2	2	
251	7¼	99.55	54 23.584	3.1402	− 2 58 20.30	.714	2	2	
253	7½	99.58	55 20.806	3.6336	−23 22 7.80	.794	2	2	
255	6	99.54	55 36.069	3.6192	−22 50 11.20	.817	2	2	
260	6.6	99.59	55 50.638	3.4306	−15 25 25.41	.837	4	4	Fund. 303.
250	5¾	99.65	56 2.037	4.2504	−42 14 13.31	.852	2	2	
257	3	99.56	56 15.006	3.8221	−30 1 22.81	.872	2	2	
265	5	99.64	56 20.369	3.2063	− 5 52 47.37	.879	2	2	
261	5¾	99.60	56 20.449	3.6769	−24 59 5.21	.879	2	2	Pr. Mo. −ˢ.005 −0″.18
274	8	99.55	57 35.405	3.0920	− 0 51 8.03	.985	2	2	N. pr. Pr. Mo. (?)
275	8½	99.58	57 36.735	3.0921	− 0 51 21.69	.987	2	2	S. fol.
272	6¼	99.65	57 38.483	3.1597	− 3 50 38.16	.990	2	2	
267	5¾	99.57	57 59.816	3.8564	−31 11 37.68	5.019	2	2	
278	4	99.54	58 41.470	3.5923	−21 53 17.29	.079	2	2	Pr. Mo. +ˢ.002 −0″.05
277	8¼	99.56	58 41.675	3.6748	−24 57 50.45	.079	2	2	
284	7¾	99.61	58 50.004	3.0949	− 0 56 29.91	.091	2	2	
282	7¼	99.60	59 30.618	3.6704	−24 49 30.90	.148	2	2	
280	5¼	99.58	59 39.593	4.0535	−37 12 25.03	.160	2	2	Dup. in Pr. Mo. +ˢ.007 −0″.33
289	6	99.64	59 40.773	3.1671	− 4 10 48.76	.162	2	2	N. fol.
286	7¾	99.65	19 0 5.264	3.7431	−27 26 18.91	.197	2	2	
295	7	99.62	0 5.931	3.0972	− 1 5 9.12	.198	2	2	
292	4	99.57	0 41.863	3.7534	−27 48 59.44	.248	2	2	Pr. Mo. −ˢ.007 −0″.25
298	3.1	99.61	0 56.503	3.1863	− 5 1 57.24	.269	4	4	Fund. B. J.
294	6½	99.61	0 57.431	3.6110	−22 39 3.17	.270	2	2	
293	6	99.56	1 13.056	3.7813	−28 47 27.24	.293	2	2	
291	5	99.60	1 23.248	4.1797	−40 39 6.49	.307	2	2	
306	7¾	99.64	1 55.544	3.1866	− 5 3 10.80	.352	2	2	
301	6½	99.54	2 8.029	3.6682	−24 48 48.65	.370	2	2	
300	5	99.58	2 40.257	4.0805	−38 3 36.47	.415	2	2	Pr. Mo. +ˢ.004 −0″.12
313	8	99.57	2 54.831	3.1964	− 5 29 23.18	.434	2	2	
305	5	99.61	3 9.074	4.1331	−39 29 58.23	.456	2	2	
310	7	99.60	3 30.755	3.7356	−27 16 24.47	.485	2	2	
315	3.1	99.61	3 49.008	3.5708	−21 10 57.50	.512	6	6	Fund. B. J.
316	6	99.55	3 54.305	3.5395	−19 57 41.44	.519	2	2	
323	7	99.58	4 39.095	3.2403	− 7 26 14.25	.582	2	2	
324	8	99.54	5 24.322	3.5526	−20 30 38.59	.645	2	2	
5	6¾	99.57	6 13.820	3.4101	−14 44 59.69	.713	2	2	
4	6¼	99.56	6 29.522	3.5857	−21 49 26.59	.736	2	2	
7	6	99.55	7 4.086	3.6991	−26 4 27.87	.785	2	2	
10	7½	99.60	7 13.880	3.5535	−20 35 23.02	.797	2	2	
16	5.8	99.61	7 15.233	3.2550	− 8 6 24.09	.800	4	4	Fund. 303.
1	6¾	99.62	7 23.247	4.3684	−45 21 44.90	.811	2	2	Pr. Mo. +ˢ.003 −0″.04
12	8	99.61	7 38.318	3.6087	−22 44 5.77	.832	2	2	
18	8	99.54	8 33.524	3.4896	−18 4 18.86	.909	2	2	
20	7½	99.60	9 3.300	3.4757	−17 31 6.48	.950	4	4	
15	6¼	99.62	9 4.983	4.3781	−45 38 26.16	.953	2	2	
21	5¼	99.57	9 24.549	3.6794	−25 25 44.99	.980	2	2	
22	6	99.58	9 27.726	3.6502	−24 20 59.46	.984	2	2	Pr. Mo. +ˢ.007 −0″.13
25	7¾	99.60	9 32.890	3.5360	−19 57 34.73	.991	2	2	
28	7¾	99.55	10 1.113	3.4146	−15 0 41.92	6.031	2	2	
34	8¼	99.61	11 2.472	3.1359	− 2 50 30.67	.116	2	2	
32	7¼	99.64	11 18.473	3.5676	−21 14 56.71	.138	2	2	
33	6¾	99.62	11 18.968	3.3235	−11 8 55.27	.138	2	2	Pr. Mo. (?)
35	5.0	99.60	11 47.031	3.5139	−19 7 51.40	.178	4	4	Fund. 303.
39	6¾	99.57	12 20.066	3.5114	−19 2 34.84	.224	2	2	
47	7¼	99.60	12 37.913	3.3341	−11 37 38.42	.248	2	2	S. fol.
43	7	99.58	12 39.287	3.5078	−18 52 38.54	.250	2	2	
36	7	99.56	12 40.264	4.0325	−37 4 29.40	.252	2	2	Pr. Mo. (?)
50	6	99.55	13 17.996	3.4297	−15 42 36.90	.304	2	2	Pr. Mo. −ˢ.008 −0″.30
53	8	99.61	13 27.085	3.3219	−11 6 41.08	.317	2	2	S. fol. 7ᵐ

Star.	Mag.	Epoch.	R. A. 1900.0.	Precess.	Decl. 1900.0.	Precess.	No. Obs.		Notes.
			h m s	s	° ′ ″	″			
P 60	6¼	1899.62	19 13 43.940	+3.0691	+ 0 9 24.37	+6.340	2	2	
48	7¼	99.64	13 58.320	4.0968	−38 55 50.24	.360	2	2	
59	7	99.60	14 36.697	3.6470	−24 23 30.72	.412	2	2	Pr. Mo. −ˢ.002 −0″.16
61	6	99.57	14 38.555	3.5997	−22 35 18.09	.415	2	2	
66	5½	99.54	15 12.621	3.1969	− 5 36 9.91	.462	2	2	Pr. Mo. (?)
72	5¼	99.58	15 26.045	3.0965	− 1 4 41.71	.481	2	2	
54	5	99.65	15 26.990	4.3222	−44 38 47.56	.483	2	2	
67	6½	99.56	15 45.562	3.5185	−19 25 17.55	.508	2	2	
69	5	99.66	15 52.354	3.4844	−18 2 7.40	.517	2	2	
79	6¼	99.62	15 56.589	3.1028	− 1 21 48.36	.523	2	2	
62	5¼	99.64	15 59.700	4.3362	−44 59 17.11	.527	2	2	
71	4.6	99.61	15 59.973	3.4386	−16 8 33.52	.528	2	2	Fund. 303.
70	5¾	99.55	16 0.906	3.4955	−18 29 38.05	.528	2	2	
82	8	99.65	16 44.813	3.5127	−19 12 46.62	.589	2	2	
83	7¾	99.57	16 50.665	3.2106	− 6 14 4.41	.597	2	2	
68	5	99.66	16 57.576	4.1623	−40 48 16.03	.607	2	2	Pr. Mo. +ˢ.002 −0″.12
77	7	99.62	17 14.621	3.9613	−35 9 31.59	.630	2	2	
85	7¼	99.64	17 18.158	3.1589	− 3 54 28.18	.636	2	2	
86	6¾	99.58	17 38.698	3.3154	−10 53 40.97	.663	2	2	
84	6	99.54	18 16.184	3.7441	−28 3 33.13	.715	2	2	
92	7½	99.56	18 38.983	3.5092	−19 7 17.95	.747	2	2	
97	7	99.61	18 55.110	3.2840	− 9 31 53.19	.769	2	2	
93	5¼	99.55	19 11.403	3.6513	−24 42 10.01	.791	2	2	
94	6¾	99.57	19 17.906	3.6487	−24 36 28.24	.801	2	2	Var. (?)
96	6	99.65	19 26.530	3.6366	−24 9 29.74	.812	2	2	
100	7½	99.66	19 43.218	3.4030	−14 43 19.03	.835	2	2	
109	8¼	99.58	20 11.121	3.1590	− 3 55 46.90	.873	2	2	
103	6	99.61	20 21.298	3.5793	−21 58 28.82	.887	2	2	
111	7¾	99.62	20 25.821	3.1222	− 2 15 31.22	.892	2	2	
107	6	99.64	20 29.651	3.4150	−15 15 4.71	.898	2	2	
104	7	99.65	20 31.446	3.5657	−21 26 37.37	.901	2	2	
102	6	99.60	20 37.353	3.7956	−29 56 27.94	.909	2	2	Pr. Mo. −ˢ.001 −0″.05
110	7	99.66	20 44.213	3.4031	−14 44 58.28	.918	2	2	
118	5	99.56	21 24.158	3.0697	+ 0 8 21.41	.973	2	2	
122	8¼	99.55	22 10.870	3.1213	− 2 13 18.88	7.036	2	2	
124	6½	99.57	22 54.168	3.4149	−15 18 20.59	.096	2	2	
126	6¼	99.58	23 41.067	3.7142	−27 11 25.24	.160	2	2	N. pr.
130	8	99.60	23 47.179	3.5656	−21 32 38.52	.168	2	2	
132	7	99.56	23 52.036	3.4195	−15 33 51.58	.174	2	2	
138	6	99.61	24 57.937	3.5641	−21 31 12.42	.264	2	2	S. pr.
143	8	99.55	25 2.808	3.1465	− 3 23 26.65	.270	2	2	
145	5.3	99.61	25 25.997	3.1379	− 2 59 50.37	.303	6	6	Fund. 303.
136	6	99.60	26 9.227	4.3374	−45 29 0.36	.361	2	2	
147	7	99.58	26 19.212	3.5681	−21 43 42.29	.375	2	2	
155	8	99.56	27 45.417	3.4955	−18 49 41.24	.491	2	2	
159	6½	99.55	28 31.748	3.6260	−24 4 31.00	.554	2	2	
170	5¼	99.61	29 36.641	3.3080	−10 46 43.44	.641	2	2	
165	7¼	99.57	29 38.067	3.6108	−23 31 41.43	.644	2	2	
166	6¾	99.60	29 40.780	3.5470	−20 59 47.44	.647	2	2	Pr. Mo. +ˢ.003 −0″.17
168	6	99.62	29 57.385	3.6471	−24 56 18.04	.670	2	2	
177	7¾	99.64	30 18.981	3.3034	−10 35 5.76	.698	2	2	
176	6	99.56	30 36.359	3.4993	−19 4 24.47	.722	2	2	
174	4.6	99.58	30 37.340	3.6507	−25 6 15.79	.723	2	2	Fund. B. J.
179	7	99.65	30 38.340	3.1303	− 2 40 28.30	.725	2	2	
182	7¼	99.61	30 53.324	3.0752	− 0 7 7.84	.745	2	2	Pr. Mo. ˢ.000 −0″.40
183	7¼	99.66	30 53.858	3.0721	+ 0 1 44.41	.746	2	2	
181	7¾	99.68	30 58.882	3.1379	− 3 1 38.81	.753	2	2	
180	6	99.62	31 15.175	3.4839	−18 27 11.65	.775	2	2	
185	8¼	99.55	31 17.407	3.3046	−10 39 28.24	.777	2	2	S. fol. Pr. Mo. −ˢ.020 −0″.30
186	7	99.64	31 21.199	3.2984	−10 22 45.12	.783	2	2	

Star.	Mag.	Epoch.	R. A. 1900.0.	Precess.	Decl. 1900.0.	Precess.	No. Obs.		Notes.
			h m s	s	° ′ ″	″			
P 187	5.0	1899.60	19 31 30.633	+3.2294	− 7 14 59.86	+7.795	2	2	Fund. 303.
188	5	99.65	31 32.859	3.1052	− 1 30 30.05	.797	2	2	
194	7¼	99.57	32 8.669	3.0881	− 0 42 56.24	.846	2	2	
198	7	99.61	32 25.560	3.0803	− 0 21 14.52	.869	2	2	
196	6¼	99.66	32 29.025	3.1775	− 4 52 14.72	.873	2	2	
200	7½	99.56	33 4.345	3.0881	− 0 42 53.12	.921	2	2	
202	7	99.58	33 14.622	3.0707	+ 0 7 8.50	.936	2	2	
199	7	99.68	33 48.861	3.6099	−23 39 18.30	.981	2	2	N. pr.
201	6	99.60	34 6.458	3.6097	−23 39 28.18	8.004	2	2	S. fol.
210	8¼	99.62	34 12.480	3.1090	− 1 41 45.45	.012	2	2	
205	7	99.57	34 16.506	3.5376	−20 46 36.41	.017	2	2	
204	8	99.55	34 21.790	3.6070	−23 33 39.02	.024	2	2	
213	7¼	99.61	34 40.218	3.2492	− 8 12 14.29	.049	2	2	Pr. Mo. (?)
214	5¾	99.64	34 59.648	3.4357	−16 31 21.28	.076	2	2	S. pr. 2ˢ
219	6	99.56	35 34.263	3.0909	− 0 51 10.61	.121	2	2	
222	5½	99.57	36 47.937	3.4306	−16 21 29.31	.218	2	2	
218	7¼	99.58	36 53.705	3.8914	−33 52 53.81	.226	2	2	
231	7½	99.55	37 40.701	3.3074	−10 54 43.36	.289	2	2	Pr. Mo. (?)
230	5¾	99.60	37 51.378	3.4148	−15 42 6.24	.303	2	2	Pr. Mo. +ˢ.011 −0″.20
232	7½	99.56	38 43.303	3.8326	−32 1 37.29	.372	2	2	
237	6½	99.58	39 4.460	3.8062	−31 8 34.66	.400	2	2	
245	8	99.57	39 13.309	3.3181	−11 25 57.36	.412	2	2	
243	5¾	99.61	39 38.471	3.8348	−32 8 58.88	.445	2	2	Pr. Mo. −ˢ.003 −0″.03
249	5.1	99.61	40 31.732	3.5132	−20 0 5.72	.517	8	8	Fund. 303.
260	7	99.56	42 6.369	3.5407	−21 12 14.04	.641	2	2	
265	6	99.57	42 25.938	3.3722	−13 56 58.72	.666	2	2	
271	6	99.58	43 16.379	3.3410	−12 34 2.29	.733	2	2	
273	5¾	99.60	43 31.405	3.3091	−11 7 9.99	.752	2	2	
266	8	99.62	43 45.458	4.1593	−42 6 37.54	.771	2	2	
281	7¼	99.55	44 20.790	3.3056	−10 58 34.08	.816	2	2	
275	5½	99.57	45 3.248	4.0832	−40 7 39.68	.873	2	2	
286	5.8	99.58	45 16.678	3.3060	−11 1 2.15	.890	4	4	Fund. 303.
288	7¾	99.60	45 46.622	3.4958	−19 27 56.45	.929	2	2	
291	6	99.66	46 23.332	3.4913	−19 17 56.85	.977	2	2	
297	5	99.60	48 21.873	4.1493	−42 7 52.31	9.132	2	2	Pr. Mo. −ˢ.003 +0″.07
302	6	99.61	48 40.673	3.8542	−33 18 26.76	.155	2	2	
309	6¼	99.62	48 42.725	3.2575	− 8 50 1.75	.158	2	2	
313	6¼	99.66	49 12.802	3.2500	− 8 29 16.06	.197	2	2	N. pr.
314	6¾	99.68	49 13.225	3.2502	− 8 29 50.74	.197	2	2	S. fol.
318	6	99.61	49 37.423	3.0725	+ 0 0 44.07	.229	2	2	
311	5¾	99.62	49 42.905	3.6660	−26 33 53.15	.236	2	2	Pr. Mo. +ˢ.015 +0″.07
322	5	99.56	50 48.726	3.6872	−27 26 5.56	.321	2	2	
329	5	99.55	52 16.762	3.4056	−15 45 24.41	.435	2	2	
331	5	99.57	52 51.669	3.6592	−26 27 58.81	.480	2	2	
330	5¼	99.58	53 13 800	3.9137	−35 32 48.34	.508	2	2	Pr. Mo. −ˢ.004 −0″.04
333	5½	99.56	53 21.874	3.8956	−34 58 1.20	.518	2	2	
328	6¼	99.60	53 43.473	4.2644	−45 23 9.20	.546	2	2	
339	8½	99.61	54 30.681	3.5262	-21 7 47.65	.606	2	2	
346	7¾	99.57	54 51.978	3.5683	−22 54 38.47	.634	2	2	
351	6	99.55	55 27.326	3.5700	−23 0 43.91	.679	2	2	
360	6.0	99.63	56 22.480	3.3621	−13 54 51.10	.749	4	4	Fund. 303.
355	4	99.60	56 30.616	3.6933	−27 59 16.64	.760	2	2	
365	7	99.56	56 30.961	3.0824	− 0 28 31.23	.761	2	2	Dup. mean. 8.8½.
353	5½	99.62	56 54.975	3.9913	−38 13 3.06	.790	2	2	
359	7	99.61	57 24.342	3.9878	−38 8 44.59	.828	2	2	Pr. Mo. Decl. −0″.3
367	7¾	99.65	57 27.241	3.4630	−18 31 17.74	.832	2	2	
369	6.5	99.57	57 48.803	3.5639	−22 52 35.09	.859	2	2	Fund. 303.
372	7¼	99.66	57 53.711	3.3997	−15 41 35.22	.865	2	2	
366	5½	99.62	57 59.243	3.8093	−32 20 12.93	.873	2	2	
376	7¾	99.55	58 19.093	3.0766	− 0 11 26.28	.898	2	2	

Star.	Mag.	Epoch.	R. A. 1900.o.	Precess.	Decl. 1900.o.	Precess.	No. Obs.		Notes.
			h m s	s	° ′ ″	″			
P 377	7	1899.56	19 59 5.030	+3.5321	−21 35 44.69	+9.957	2	2	
374	6	99.60	59 9.493	3.8343	−33 16 59.47	.962	2	2	
383	5¾	99.58	59 14.045	3.0927	− 0 59 17.85	.968	2	2	Pr. Mo. −ˢ.002 −0″.10
382	6¼	99.61	59 34.097	3.3166	−11 52 56.17	.993	2	2	
381	7¼	99.64	59 40.431	3.4194	−16 39 24.04	10.001	2	2	
384	6¾	99.57	59 52.753	3.3390	−12 56 51.76	.016	2	2	
389	8½	99.65	59 59.186	3.2122	− 6 52 7.94	.025	2	2	
387	8¼	98.74	20 0 3.855	3.3982	−15 42 26.65	.031	2	2	
388	8	98.70	0 25.490	3.4885	−19 46 31.44	.058	2	2	
390	8¼	98.68	0 40.742	3.5387	−21 57 36.56	.078	2	2	Pr. Mo. −ˢ.017 −0″.15
—	8½	98.72	0 45.774	3.1883	− 5 42 46.13	.084	1	1	
396	8¼	98.71	1 11.698	3.3437	−13 12 48.95	.116	2	2	
398	7½	98.75	1 17.285	3.3334	−12 43 36.57	.123	2	2	
399	7¾	99.60	1 30.154	3.2595	− 9 12 4.58	.139	2	2	
403	8	99.61	1 58.999	3.0960	− 1 9 37.23	.175	2	2	
402	7	99.62	2 26.401	3.4710	−19 5 35.36	.210	2	2	
404	6¼	98.74	2 50.680	3.3875	−15 19 6.12	.240	2	2	Pr. Mo. ˢ.000 −0″.15
408	6¼	99.64	2 51.931	3.0921	− 0 57 58.18	.241	2	2	
406	6½	98.72	3 3.256	3.2826	−10 21 7.52	.256	2	2	
410	7½	98.70	3 42.822	3.5103	−20 53 1.82	.305	2	2	Pr. Mo. +ˢ.003 −0″.12
405	6½	99.60	4 19.573	4.1767	−43 57 25.61	.351	2	2	
411	6	98.71	4 37.733	3.9142	−36 21 6.14	.373	2	2	Pr. Mo. +ˢ.037 −1″.64
417	7	99.61	4 37.778	3.4818	−19 40 27.92	.374	2	2	Pr. Mo. − .002 −0 .13
423	7¾	99.62	5 10.012	3.2020	− 6 27 28.84	.414	2	2	
416	6¾	99.65	5 31.542	4.1398	−43 4 28.53	.441	2	2	
4	6¼	99.64	5 44.728	3.2562	− 9 8 17.93	.457	2	2	
6	6¾	99.68	5 46.138	3.2003	− 6 23 1.68	.460	2	2	
10	3.0	98.68	6 8.689	3.0950	− 1 7 5.56	.487	2	2	Fund. B. J.
11	8¼	98.74	6 9.123	3.0814	− 0 26 9.65	.488	2	2	S. pr.
12	7½	98.72	6 10.651	3.0811	− 0 25 20.04	.490	2	2	N. fol.
8	8	99.62	6 16.018	3.2014	− 6 26 48.24	.497	2	2	
7	6½	99.65	6 25.399	3.3291	−12 41 22.03	.508	2	2	
18	7½	99.64	6 41.590	3.0751	− 0 7 5.07	.528	2	2	
16	6½	99.68	6 51.527	3.3334	−12 54 37.67	.541	2	2	Pr. Mo. +ˢ.012 −0″.20
20	8¼	98.71	7 15.554	3.2964	−11 8 20.51	.570	2	2	
31	5¾	99.62	8 3.995	3.0986	− 1 18 32.74	.630	2	2	
33	7¼	99.64	8 55.959	3.4734	−19 30 36.58	.694	2	2	
29	6	98.72	9 3.007	3.6569	−27 19 53.06	.704	2	2	Pr. Mo. +ˢ.094 −0″.24
41	8	98.74	9 12.378	3.0758	− 0 9 30.57	.715	2	2	
40	7	99.60	9 19.128	3.2963	−11 11 37.16	.723	2	2	
39	8½	98.70	9 20.572	3.3116	−11 56 23.39	.725	2	2	
45	7¼	98.68	10 22.288	3.4085	−16 35 59.95	.801	2	2	
50	8¼	98.71	10 30.309	3.1292	− 2 52 12.29	.811	2	2	
49	6¼	99.61	10 50.609	3.3250	−12 38 35.94	.836	2	2	
54	4.3	98.74	12 6.306	3.3277	−12 49 2.06	.928	2	2	Fund. B. J.
53	6.1	98.75	12 8.896	3.5282	−22 7 8.43	.932	2	2	Fund. 303.
53		99.60	.915		8.24		2	2	
58	3.3	98.70	12 30.391	3.3282	−12 51 18.10	.958	2	2	Fund. B. J.
58		99.64	30.366		18.58		2	2	
66	7½	98.71	13 26.228	3.3636	−14 36 10.83	11.026	2	2	
67	5	99.61	13 37.492	3.4664	−19 25 50.91	.039	2	2	
73	7¾	98.68	14 16.761	3.3626	−14 35 16.51	.087	2	2	
76	6¾	99.60	14 41.268	3.4768	−19 57 38.42	.117	2	2	
84	6¾	99.64	15 6.694	3.2027	− 6 40 27.65	.148	2	2	Pr. Mo. (?)
81	5	98.75	15 6.999	3.3308	−13 4 26.00	.149	2	2	
79	6¼	98.74	15 9.445	3.3725	−15 6 0.80	.151	2	2	
80	7½	98.70	15 16.964	3.4474	−18 38 21.52	.160	2	2	
83	3.0	98.72	15 23.568	3.3722	−15 5 50.01	.169	2	2	Fund. B. J.
83		99.68	23.629		50.02		2	2	
75	6¼	99.62	15 40.293	4.0844	−42 21 54.21	.189	2	2	Pr. Mo. +ˢ.005 −0″.11

Star.	Mag.	Epoch.	R. A. 1900.0.	Precess.	Decl. 1900.0.	Precess.	No. Obs.		Notes.
			h m s	s	° ′ ″	″			
P 90	7½	1899.65	20 15 48.815	+3.2024	− 6 40 10.72	+11.198	2	2	Pr. Mo. (?)
88	7¾	98.71	16 14.666	3.5264	− 22 16 27.89	.230	2	2	
95	7¾	99.61	16 33.914	3.2063	− 6 53 2.56	.253	2	2	
94	7¾	99.66	16 43.117	3.3929	− 16 8 45.93	.265	2	2	
96	8	99.64	17 3.949	3.3217	− 12 42 3.70	.289	2	2	
87	6¼	99.62	17 5.402	4.0937	− 42 44 38.66	.291	2	2	
98	8	99.60	17 10.204	3.2508	− 9 8 39.47	.297	2	2	
97	7¾	99.65	17 23.887	3.4455	− 18 39 41.48	.314	2	2	
100	8	98.75	17 33.361	3.3913	− 16 6 36.21	.325	2	2	
103	7¾	98.74	17 40.830	3.1885	− 5 59 44.58	.334	2	2	
102	7¼	98.72	17 50.653	3.3594	− 14 34 37.54	.346	2	2	
105	7½	98.68	18 24.516	3.5580	− 23 47 51.14	.386	2	2	
107	7	98.70	18 38.944	3.3558	− 14 26 8.51	.404	2	2	
109	7	98.71	19 18.104	3.4669	− 19 45 27.15	.451	2	2	
115	7½	99.61	19 31.025	3.1084	− 1 51 53.69	.467	2	2	
114	7¼	99.60	19 37.772	3.3063	− 12 1 42.79	.474	2	2	
121	7¾	99.62	19 56.877	3.1445	− 3 44 54.94	.497	2	2	
111	6	98.76	20 24.385	3.9188	− 37 43 36.26	.530	3	3	Pr. Mo. (?)
123	7¾	98.74	20 36.504	3.4593	− 19 28 41.86	.544	2	2	
125	7½	99.64	20 42.510	3.3490	− 14 11 21.37	.552	2	2	
128	7¾	99.66	20 46.925	3.1528	− 4 11 27.05	.556	2	2	
129	8¼	98.72	20 48.097	3.1447	− 3 46 15.21	.559	2	2	
127	8¼	99.65	21 16.720	3.4670	− 19 52 23.99	.592	2	2	
131	(5)	98.70	21 35.855	3.4382	− 18 32 22.99	.615	2	2	2″ dup. N. pr.
139	7¼	99.62	22 15.626	3.1191	− 2 26 47.71	.662	2	2	S. pr. Pr. Mo. −ˢ.010 −0″.06
138	8	99.60	22 15.937	3.1435	− 3 43 27.66	.662	2	2	
140	6¼	99.61	22 16.315	3.1189	− 2 25 48.66	.663	2	2	N. fol. Pr. Mo. −ˢ.011 −0″.08
133	6	98.68	22 21.831	3.8603	− 35 55 32.62	.669	2	2	
142	5.1	98.71	23 9.426	3.4281	− 18 8 40.24	.726	2	2	Dup. mean. Fund. B. J.
142		99.70	9.431		39.67		4	4	North star. Fund. B. J.
147	6¾	99.65	23 10.685	3.1426	− 3 41 17.48	.727	2	2	
145	6¾	99.64	23 17.445	3.4200	− 17 45 56.63	.736	2	2	
144	6¾	98.75	23 18.005	3.4292	− 18 12 13.79	.737	2	2	Pr. Mo. −ˢ.001 −0″.12
148	7¾	98.74	23 21.066	3.1630	− 4 45 34.70	.740	2	2	
146	6	98.72	23 39.322	3.5261	− 22 43 23.45	.762	2	2	
153	6¾	99.68	24 8.609	3.4432	− 18 55 2.24	.796	2	2	S. pr. Pr. Mo. (?)
154	6¼	99.66	24 9.964	3.4431	− 18 54 51.35	.797	2	2	N. fol. Pr. Mo. −ˢ.001 −0″.10
157	6	98.70	24 25.364	3.1334	− 3 13 5.64	.816	2	2	
158	7½	99.60	24 45.487	3.1630	− 4 46 8.71	.839	2	2	Pr. Mo. (?)
159	7¼	99.61	25 16.518	3.1807	− 5 43 27.80	.876	2	2	
160	8	99.62	25 20.676	3.1890	− 6 9 39.42	.880	2	2	
161	6¾	99.64	25 28.998	3.2697	− 10 22 10.95	.891	2	2	
165	7½	98.71	26 21.752	3.5780	− 25 12 29.96	.953	2	2	
166	7¾	98.74	26 22.174	3.5172	− 22 29 32.88	.953	2	2	N. pr.
167	8¼	98.75	26 24.357	3.5173	− 22 29 58.83	.956	2	2	S. fol.
175	8	99.65	26 41.443	3.1435	− 3 46 44.13	.975	2	2	
176	6½	99.66	26 47.610	3.1799	− 5 34 51.21	.982	2	2	Pr. Mo. (?)
172	7	98.68	26 51.801	3.3993	− 16 56 51.47	.987	2	2	
170	6¼	98.72	26 55.128	3.5788	− 25 16 53.01	.992	2	2	
174	6.0	99.62	26 55.456	3.2654	− 10 11 40.92	.992	3	3	Fund. 303.
163	6	99.68	27 2.846	4.1383	− 44 51 17.34	12.001	2	2	
180	7	99.61	27 40.546	3.5170	− 22 34 13.57	.044	2	2	
181	7	98.70	28 24.760	3.9188	− 38 25 54.81	.096	2	2	
187	6¼	99.62	28 37.728	3.3397	− 14 3 53.38	.111	2	2	
193	8½	98.71	29 22.778	3.2490	− 9 25 8.54	.163	2	2	
195	7¾	98.74	29 49.201	3.2474	− 9 20 49.56	.194	2	2	
194	6½	98.72	29 52.705	3.3945	− 16 52 8.96	.198	2	2	
202	7¾	98.75	30 15.322	3.1171	− 2 23 46.46	.224	2	2	
200	6¾	98.68	30 39.289	3.4775	− 20 55 50.83	.252	2	2	
212	5.0	98.70	31 31.171	3.1261	− 2 53 46.95	.312	2	2	Fund. 303.

Star.	Mag.	Epoch.	R. A. 1900.0.	Precess.	Decl. 1900.0.	Precess.	No. Obs.		Notes.
			h m s	s	° ′ ″	″			
P 212		1899.62	20 31 31.200	+3.1261	− 2 53 47.11	+12.312	2	2	Fund. 303 con.
209	6¼	99.64	31 44.836	3.3650	−15 29 38.21	.327	2	2	
216	7¼	99.65	32 0.766	3.1032	− 1 39 34.29	.345	2	2	
213	7¾	98.71	32 8.960	3.4041	−17 28 13.57	.356	2	2	
215	7½	98.72	32 37.367	3.4835	−21 20 32.07	.388	2	2	
221	6½	99.66	32 52.879	3.1596	− 4 43 51.42	.405	2	2	
218	7½	99.68	33 2.892	3.4020	−17 24 52.73	.416	2	2	
224	5	98.75	33 10.373	3.0994	− 1 27 16.71	.426	2	2	
225	5¾	99.64	33 40.846	3.3594	−15 18 20.37	.461	2	2	N. prec.
229	8	99.62	33 57.328	3.3595	−15 19 36.81	.480	2	2	S. fol.
234	6¾	99.65	34 1.124	3.1232	− 2 45 52.88	.484	2	2	
219	6½	99.66	34 13.172	4.0391	−42 45 2.37	.498	2	2	
237	5¾	99.68	34 17.352	3.0703	+ 0 8 5.56	.501	2	2	
233	5.6	98.68	34 21.442	3.4222	−18 29 27.01	.507	2	2	Fund. B. J.
233		99.69	21.473		27.48		2	2	
223	6¾	99.64	34 43.026	4.0286	−42 29 15.48	.532	2	2	
240	6	98.70	34 55.375	3.3812	−16 28 48.13	.545	2	2	
246	6¾	98.71	34 59.972	3.1275	− 3 0 22.82	.551	2	2	
250	7	98.72	35 39.158	3.4054	−17 43 59.59	.595	2	2	
259	8	98.74	36 17.820	3.2801	−11 18 4.07	.638	2	2	Var. (?)
260	8¼	98.75	36 39.129	3.1158	− 2 22 38.08	.663	2	2	
262	7¼	99.61	37 12.807	3.2799	−11 19 38.61	.701	2	2	
266	8¼	98.70	37 54.081	3.5801	−26 11 7.49	.748	2	2	
267	7¼	98.68	38 19.413	3.8265	−36 11 18.50	.776	2	2	
286	7¼	98.74	39 48.923	3.0739	− 0 4 4.88	.876	2	2	
274	5½	98.71	39 49.164	3.9193	−39 33 42.93	.877	2	2	
276	6½	98.72	39 56.549	3.8302	−36 28 56.77	.885	2	2	
282	4	98.75	40 10.527	3.5636	−25 37 49.80	.900	2	2	Pr. Mo. −ˢ.006 −0″.16
284	6	99.61	40 22.191	3.4834	−21 52 39.34	.914	2	2	
290	7¾	99.62	40 34.631	3.2313	− 8 49 11.50	.927	2	2	
289	6	99.64	41 42.503	4.0696	−44 21 10.73	13.003	2	2	Pr. Mo. +ˢ.014 −0″.11
297	8¼	98.70	41 57.654	3.1697	− 5 26 57.79	.019	2	2	
299	3.6	98.71	42 15.737	3.2493	− 9 51 42.30	.039	2	2	Fund. B. J.
299		99.67	15.779		43.04		10	10	
296	7¾	98.68	42 26.722	3.5080	−23 12 48.61	.052	2	2	
301	4	98.74	42 27 610	3.1685	− 5 23 37.64	.053	2	2	
298	7	98.72	42 31.611	3.5055	−23 6 13.72	.057	2	2	Pr. Mo. ˢ.000 −0″.19
305	6	98.75	43 21.391	3.5693	−26 9 1.72	.112	2	2	
311	7¼	99.62	43 33.928	3.3057	−12 58 48.02	.126	2	2	
310	6¼	99.65	43 40.195	3.4089	−18 24 17.37	.133	2	2	
307	5	99.64	43 43.434	3.7578	−34 9 0.12	.137	2	2	
312	7½	99.66	44 5.666	3.6031	−27 44 16.38	.161	2	2	
325	6	98.70	45 11.072	3.3030	−12 54 56.06	.232	2	2	
322	7	98.71	45 34.809	3.5974	−27 37 3.98	.258	2	2	
320	6	98.74	45 46.149	3.7373	−33 33 6.36	.272	2	2	
328	4	98.72	45 51.258	3.5896	−27 17 35.32	.277	2	2	Pr. Mo. −ˢ.003 −0″.01
336	6¼	98.75	46 7.569	3.1779	− 6 0 1.97	.295	2	2	
337	6¼	98.68	46 32.533	3.2817	−11 48 50.09	.323	2	2	
340	8¼	99.62	46 32.656	3.1631	− 5 10 15.07	.323	2	2	
342	5¾	99.64	46 51.360	3.1755	− 5 52 56.17	.342	2	2	
341	7	99.70	46 59.911	3.3136	−13 34 43.98	.351	2	2	
344	7¼	99.65	47 2.758	3.1613	− 5 4 42.16	.354	2	2	
347	8	99.66	47 7.687	3.0813	− 0 29 40.57	.360	2	2	
346	7½	99.68	47 8.291	3.1354	− 3 35 42.64	.361	2	2	
339	6¼	99.61	47 9.361	3.5198	−24 9 28.86	.362	2	2	Dup. N. star.
334	5½	99.69	47 9.914	3.9145	−40 11 3.46	.362	2	2	Pr. Mo. ˢ.000 −0″.11
343	8¼	99.71	47 13.153	3.3687	−16 32 27.85	.366	2	2	3″ dup. S. pr.
345	4¼	99.73	47 15.607	3.2369	− 9 21 30.75	.369	2	2	
351	6½	99.62	47 37.423	3.2833	−11 57 6.53	.393	2	2	
348	7¼	99.61	47 59.370	3.5723	−26 41 42.19	.416	2	2	

Star.	Mag.	Epoch.	R. A. 1900.0.	Precess.	Decl. 1900.0.	Precess.	No. Obs.		Notes.	
			h m s	s	° ′ ″	″				
P 353	8	1898.70	20 48 29.135	+3.5554	−25 57 13.61	+13.449	2	2		
360	6	98.74	48 38.608	3.1991	− 7 16 2.40	.459	2	2		
364	6¾	99.65	48 48.959	3.1580	− 4 55 16.25	.469	2	2		
362	6.0	98.72	49 8.823	3.3998	−18 18 7.82	.492	2	2	Fund. 303.	
362		99.70	8.833		7.62		2	2		
367	7¾	99.66	49 21.724	3.3498	−15 39 46.43	.505	2	2		
361	8½	98.75	49 25.111	3.5651	−26 29 33.89	.509	2	2		
363	7¾	99.68	49 41.807	3.6878	−31 56 1.53	.527	2	2	S. pr.	
369	7½	99.69	49 43.467	3.2036	− 7 33 14.56	.529	2	2	Pr. Mo. (?)	
366	7¾	99.62	49 46.663	3.6865	−31 53 12.51	.532	2	2	N. fol.	
370	6	99.65	50 50.873	3.5666	−26 40 39.78	.601	2	2		
375	8¼	99.66	51 10.480	3.3584	−16 14 4.39	.622	2	2		
380	5	98.74	51 29.724	3.2469	−10 4 51.01	.643	2	2		
377	8¾	98.70	51 35.806	3.3639	−16 33 25.26	.649	2	2		
385	8¼	99.68	51 43.693	3.1904	− 6 51 16.48	.657	2	2		
386	6	98.75	52 4.794	3.3607	−16 24 59.32	.680	2	2		
390	8	98.72	52 15.996	3.1345	− 3 37 16.45	.693	2	2		
384	8¾	98.71	52 21.939	3.6849	−32 5 24.36	.699	2	2		
396	6¾	99.62	53 31.038	3.1446	− 4 13 43.69	.772	2	2		
397	7¼	99.64	53 36.206	3.1356	− 3 42 15.77	.778	2	2		
394	7¾	99.65	53 50.464	3.3743	−17 16 2.47	.792	2	2		
395	6	99.69	53 55.291	3.4148	−19 25 22.69	.797	2	2		
392	7	99.66	53 59.630	3.7423	−34 37 21.99	.802	2	2		
398	7¾	99.68	54 21.652	3.5817	−27 43 49.85	.825	2	2		
402	6½	98.70	54 25.105	3.3041	−13 26 26.00	.829	2	2		
408	7¾	98.68	54 53.914	3.2675	−11 23 53.76	.860	2	2		
403	5	98.72	55 9.575	3.6910	−32 38 54.52	.876	2	2	Pr. Mo. −ˢ.002	o″.00
409	6¼	99.62	55 14.161	3.3847	−17 55 15.03	.881	2	2		
413	6¾	99.64	55 15.600	3.1718	− 5 52 1.77	.882	2	2	Pr. Mo. +ˢ.002	−o″.14
414	6.0	98.74	55 17.913	3.1591	− 5 6 59.69	.884	2	2	Fund. 303.	
414		99.70	17.862		7 0.08		4	4		
416	7¾	99.65	55 23.877	3.1698	− 5 44 52.87	.890	2	2		
405	7¾	98.71	55 32.190	3.7978	−36 57 56.10	.900	2	2		
415	6	99.69	55 37.694	3.3115	−13 55 15.77	.905	2	2		
411	6¼	99.66	55 49.256	3.5688	−27 16 19.97	.918	2	2		
423	7	99.65	56 32.574	3.2782	−12 5 16.33	.963	2	2		
418	5¾	99.68	56 34.643	3.8501	−39 1 19.31	.965	2	2	Pr. Mo. −ˢ.003	−o″.14
426	8	99.69	57 4.827	3.2688	−11 34 27.25	.996	2	2		
425	7¾	99.62	57 25.726	3.5280	−25 28 7.79	14.019	2	2		
428	7¼	98.70	57 42.627	3.3804	−17 51 47.95	.036	2	2		
432	7	98.72	57 50.306	3.0947	− 1 19 8.94	.043	2	2		
438	8¾	98.74	58 22.469	3.1835	− 6 38 12.40	.078	2	2		
433	7¾	98.71	58 23.151	3.3914	−18 30 25.55	.079	2	2		
436	5	99.64	58 42.895	3.4234	−20 15 1.16	.099	2	2		
441	(6)	98.68	58 47.316	3.1763	− 6 13 8.62	.103	2	2	3″ dup. N. fol.	
430	6½	99.66	58 59.892	4.0336	−45 20 46.60	.117	2	2		
435	7¾	98.75	59 4.304	3.6830	−32 44 32.99	.121	2	2		
443	7¼	99.65	59 14.596	3.3729	−17 33 37.71	.131	2	2		
439	5¼	99.62	59 55.213	3.9178	−41 47 4.30	.174	2	2	S. pr.	
444	6	99.68	59 58.946	3.6301	−30 31 20.20	.177	2	2		
442	8¼	99.66	21 0 6.878	3.9170	−41 46 59.96	.185	2	2		
445	5	99.69	0 17.903	3.6797	−32 44 29.60	.198	2	2		
451	5	99.70	0 19.593	3.3727	−17 37 48.79	.199	2	2		
454	6½	98.70	0 59.903	3.4261	−20 34 48.93	.241	2	2		
456	5	98.72	1 16.789	3.5192	−25 24 20.21	.257	2	2	Pr. Mo. −ˢ.005	−o″.04
460	7¼	98.71	1 34.917	3.3486	−16 22 25.32	.276	2	2		
461	7½	99.65	1 38.621	3.3444	−16 8 40.37	.280	2	2	Pr. Mo. −ˢ.007	−o″.21
459	7	99.64	1 39.543	3.6469	−31 27 41.59	.281	2	2	Pr. Mo. (?)	
462	6¾	99.62	1 49.896	3.4046	−19 29 18.14	.291	2	2		
466	7½	98.75	2 24.543	3.3413	−16 1 33.63	.327	2	2		

Star.	Mag.	Epoch.	R. A. 1900.0.	Precess.	Decl. 1900.0.	Precess.	No. Obs.		Notes.
			h m s	s	° ′ ″	″			
P 470	7¼	1899.68	21 2 25.715	+3.1706	− 5 58 28.36	+14.328	2	2	Pr. Mo. +s.017 +0″.19
469	5¼	99.69	2 50.066	3.4423	−21 35 43.16	.351	2	2	
468	7	99.66	3 0.474	3.5872	−28 52 41.13	.362	2	2	Pr. Mo. +s.006 −0″.19
474	6½	99.64	3 33.588	3.4224	−20 35 52.28	.397	2	2	
481	6¾	98.75	3 49.849	3.3572	−17 1 15.90	.413	2	2	
478	6¼	99.62	3 50.023	3.4287	−20 57 28.98	.413	2	2	Pr. Mo. +s.007 −0″.13
477	7¼	98.70	4 5.707	3.6114	−30 7 36.82	.429	2	2	
485	4.3	98.68	4 8.855	3.2662	−11 46 35.95	.432	2	2	Fund. B. J.
485		99.70	8.850		36.21		2	2	
483	8	98.71	4 31.781	3.5841	−28 53 50.30	.457	2	2	
487	7¾	98.72	4 34.878	3.3402	−16 6 26.64	.459	2	2	
493	7	99.65	5 23.355	3.2314	− 9 45 35.67	.508	2	2	
7	6¾	98.74	6 9.834	3.3171	−14 52 52.09	.554	2	2	
8	7½	99.66	6 21.547	3.4206	−20 44 28.27	.566	2	2	
4	7¾	99.64	6 21.716	3.5677	−28 18 49.42	.566	2	2	
11	7½	99.68	6 34.524	3.3181	−14 58 3.31	.579	2	2	
2	5¾	99.62	6 39.258	3.8380	−39 49 56.35	.584	2	2	Pr. Mo. (?)
12	5	98.70	7 21.588	3.5595	−28 1 38.20	.626	2	2	Pr. Mo. +s.006 −0″.11
16	8¼	98.71	7 28.356	3.1941	− 7 34 1.91	.633	2	2	
14	7¼	98.72	8 0.988	3.6007	−30 4 28.90	.665	2	2	Pr. Mo. (?)
24	7¼	99.65	8 13.027	3.1736	− 6 19 25.32	.678	2	2	
20	7¼	99.66	8 16.752	3.4132	−20 30 2.13	.681	2	2	
18	6½	98.68	8 17.061	3.4522	−22 37 28.05	.682	2	2	
17	6¼	99.62	8 49.167	3.8600	−40 55 13.87	.714	2	2	
28	7¾	99.64	9 16.340	3.4242	−21 12 0.19	.741	2	2	Pr. Mo. (?)
27	7	98.74	9 19.385	3.4430	−22 13 45.82	.743	2	2	
34	7	99.68	9 35.698	3.1919	− 7 30 4.53	.759	2	2	
33	5½	99.69	9 56.456	3.4207	−21 4 0.83	.780	2	2	
37	5½	98.71	10 12.778	3.3244	−15 35 13.32	.796	2		
39	7¼	98.70	10 26.818	3.2241	− 9 32 10.99	.810	2	2	
40	7½	99.65	10 32.537	3.2285	− 9 48 26.28	.815	2	2	
44	6¼	98.75	10 55.662	3.2253	− 9 37 52.45	.838	2	2	S. pr.
41	7	99.66	10 59.713	3.4104	−20 35 22.69	.842	2	2	
45	7¼	98.72	11 7.567	3.2242	− 9 34 27.94	.850	2	2	N. fol.
42	6½	99.62	11 25.190	3.6152	−31 9 48.72	.867	2	2	
46	5	98.74	11 52.548	3.6449	−32 35 25.61	.894	2	2	Pr. Mo. +s.003 −0″.04
52	5	98.68	12 20.777	3.3699	−18 24 14.66	.921	2	2	
56	6¾	99.65	12 39.970	3.3604	−17 52 53.78	.941	2	2	
57	6¾	99.66	12 45.920	3.4104	−20 45 15.54	.946	2	2	
60	6	99.68	12 56.312	3.1497	− 4 56 21.94	.956	2	2	
55	6½	99.64	12 59.802	3.5699	−29 11 3.30	.960	2	2	Pr. Mo. (?)
59	8	98.71	13 3.036	3.2730	−12 41 4.78	.963	2	2	
66	7	98.70	13 41.661	3.3372	−16 35 58.61	15.000	2	2	
65	7	98.75	13 58.658	3.5365	−27 37 51.25	.016	2	2	
64	5¼	99.62	14 22.060	3.8477	−41 13 56.66	.039	2	2	Pr. Mo. +s.005 −0″.01
70	8¼	98.72	14 24.576	3.1642	− 5 54 30.36	.041	2	2	
75	7¼	98.74	15 22.270	3.4147	−21 14 35.22	.097	2	2	
79	8¼	99.68	15 28.530	3.1016	− 1 52 43.74	.103	2	2	
81	6.0	98.71	15 49.778	3.1493	− 4 59 4.39	.123	2	2	Fund. 303.
81		99.65	49.744		4.48		6	6	
78	6¾	99.69	15 52.971	3.5710	−29 35 25.40	.127	2	2	
82	7½	99.70	16 4.570	3.2572	−11 52 53.05	.137	2	2	
84	4	98.68	16 40.729	3.3443	−17 15 37.23	.172	2	2	Pr. Mo. +s.002 0″.00
87	5	98.70	17 16.578	3.4443	−23 5 45.67	.206	2	2	
92	6	98.72	17 34.584	3.2222	− 9 44 43.66	.223	2	2	
95	7¾	98.75	17 36.225	3.1332	− 3 58 21.39	.225	2	2	
89	6	99.62	18 2.443	3.8389	−41 26 7.75	.250	2	2	
93	6¼	99.64	18 7.429	3.4890	−25 37 48.42	.254	2	2	
97	6¾	99.65	18 24.473	3.4436	−23 10 32.04	.270	2	2	
96	7½	98.74	18 26.135	3.4950	−25 59 22.15	.272	2	2	

Star.	Mag.	Epoch.	R. A. 1900.0.	Precess.	Decl. 1900.0.	Precess.	No. Obs.		Notes.
			h m s	s	° ′ ″	″			
P 59	6	1899.66	21 18 29.352	+3.4100	−21 16 37.39	+15.275	2	2	Pr. Mo. −s.003 −0″.12
98	7	99.68	18 34.020	3.4737	−24 51 2.80	.279	2	2	
101	7¼	99.69	18 38.220	3.4529	−23 43 10.53	.284	2	2	
104	6	98.71	18 43.652	3.2773	−13 18 25.68	.288	2	2	
106	7¾	99.70	19 15.373	3.2594	−12 12 31.83	.319	2	2	
109	6	99.64	19 38.948	3.1303	− 3 49 36.89	.341	2	2	
110	6	99.71	19 50.633	3.2270	−10 10 27.95	.351	2	2	Pr. Mo. s.000 −0″.17
112	7¾	99.65	19 56.272	3.1090	− 2 25 8.10	.357	2	2	
108	7	99.62	20 0.337	3.4857	−25 40 9.15	.361	2	2	
113	5½	98.75	20 4.035	3.1326	− 3 59 7.68	.365	2	2	
111	7½	98.70	20 21.384	3.4711	−24 54 55.98	.380	2	2	
107	6¼	99.66	20 36.833	3.8709	−42 58 51.69	.395	2	2	N. pr. dup.
115	7½	98.68	20 41.690	3.4088	−21 25 51.25	.399	2	2	
118	4.1	98.72	20 57.519	3.4329	−22 50 40.68	.414	2	2	Fund. B. J.
119	7	99.68	20 59.111	3.2626	−12 31 19.80	.415	2	2	Pr. Mo. +s.002 −0″.25
122	5¾	98.74	21 34.691	3.4106	−21 37 44.06	.449	2	2	
121	7	99.64	21 40.907	3.5287	−28 9 38.24	.454	2	2	
123	7¼	99.69	21 50.827	3.3933	−20 38 39.86	.463	2	2	Pr. Mo. s.000 −0″.12
125	7¼	99.65	21 55.168	3.2852	−14 1 16.86	.468	2	2	S. pr.
126	7	99.70	22 13.357	3.2548	−12 5 57.43	.485	2	2	Pr. Mo. (?)
127	7¾	99.73	22 30.880	3.4180	−22 9 13.01	.500	2	2	Pr. Mo. +s.003 −0″.31
128	7½	99.66	22 32.533	3.2862	−14 7 51.80	.502	2	2	
130	8	99.62	22 39.588	3.2585	−12 21 47.30	.509	2	2	
131	8½	99.68	22 42.600	3.2609	−12 31 25.28	.512	2	2	
135	7¾	99.71	22 42.891	3.1151	− 2 51 44.31	.512	2	2	Pr. Mo. (?)
134	6¾	99.64	22 49.010	3.2527	−12 0 7.68	.518	2	2	
132	5	98.75	23 1.308	3.4186	−22 14 34.00	.528	2	2	Pr. Mo. (?)
129	6¼	99.69	23 5.362	3.5943	−31 40 26.51	.533	2	2	
138	7¼	99.65	23 7.355	3.1177	− 3 2 45.20	.535	2	2	
139	7	99.70	23 9.644	3.1217	− 3 19 13.21	.536	2	2	
143	8½	98.70	24 3.299	3.2594	−12 30 56.64	.586	2	2	
144	7	99.66	24 11.629	3.2895	−14 27 44.35	.593	2	2	
145	7	98.72	24 22.853	3.3714	−19 35 2.93	.604	2	2	
147	7¾	99.68	24 38.220	3.4613	−24 51 55.26	.618	2	2	
148	7¼	99.68	24 39.482	3.4749	−25 37 51.61	.619	2	2	
154	6½	99.69	25 11.781	3.2925	−14 43 44.63	.648	2	2	
152	5½	99.70	25 46.141	3.8130	−41 37 11.53	.680	2	2	
158	7¼	98.71	25 48.719	3.3706	−19 40 37.18	.682	2	2	
155	6	99.64	26 11.768	3.6416	−34 23 7.26	.703	2	2	
162	3.0	98.75	26 17.693	3.1602	− 6 0 40.39	.708	2	2	Fund. B. J.
162		99.72	17.696		40.14		4	4	
161	6	99.65	26 47.656	3.4597	−25 1 55.48	.735	2	2	
167	7¾	98.72	27 13.484	3.1706	− 6 44 59.25	.759	2	2	
165	8	99.66	27 33.712	3.3914	−21 7 6.77	.777	2	2	
164	7½	99.68	27 38.779	3.5174	−28 19 51.44	.781	2	2	Pr. Mo. (?)
172	7¼	99.64	28 7.086	3.2762	−13 53 34.37	.808	2	2	
171	7¼	99.69	28 8.778	3.3185	−16 38 27.49	.808	2	2	Pr. Mo. +s.003 −0″.15
169	7¾	99.70	28 18.167	3.5159	−28 20 34.69	.817	2	2	
175	7¾	99.62	28 22.714	3.1709	− 6 48 59.28	.821	2	2	
176	7¾	98.74	28 30.880	3.1570	− 5 51 38.19	.828	2	2	
182	8¼	98.71	28 47.976	3.0759	− 0 13 10.48	.844	2	2	
177	7	98.68	28 49.321	3.2755	−13 55 40.20	.845	2	2	
180	6	99.65	29 14.115	3.3788	−20 31 48.45	.867	2	2	
179	7¾	98.75	29 14.221	3.3847	−20 53 21.90	.867	2	2	
181	6¾	99.66	29 17.575	3.3814	−20 41 45.24	.870	2	2	
186	7¼	99.68	29 22.568	3.2098	− 9 31 51.92	.875	2	2	
184	6¾	99.69	29 32.840	3.4343	−23 53 57.64	.883	2	2	
187	7½	99.71	29 43.411	3.3644	−19 41 22.83	.893	2	2	
190	6	98.72	30 4.359	3.1357	− 4 25 43.49	.912	2	2	
188	6	99.64	30 23.120	3.4797	−26 37 3.48	.929	2	2	

Star.	Mag.	Epoch.	R. A. 1900.0.	Precess.	Decl. 1900.0.	Precess.	No. Obs.		Notes.
			h m s	s	° ′ ″	″			
P 193	7½	1899.70	21 30 48.109	+3.3491	−18 50 20.56	+15.951	2	2	
189	6¼	99.65	30 48.590	3.6088	−33 29 43.62	.951	2	2	
197	4.7	98.70	31 28.922	3.3651	−19 54 51.02	.986	2	2	Fund. 303.
197		99.65	28.924		51.26		4	4	
199	7	98.71	31 46.529	3.3483	−18 53 12.50	16.002	2	2	
201	7¾	98.74	32 2.241	3.3604	−19 40 47.70	.016	2	2	
206	8¼	98.75	32 17.626	3.3137	−16 42 4.96	.029	2	2	
204	7	99.64	32 25.241	3.4623	−25 53 41.15	.037	2	2	
209	5	99.66	32 25.669	3.1898	− 8 18 9.86	.037	2	2	
207	7½	98.68	32 41.834	3.5050	−28 20 37.03	.050	2	2	
212	7¼	99.69	32 45.097	3.2928	−15 21 38.57	.054	2	2	
214	8¼	98.72	33 1.893	3.3220	−17 18 45.92	.068	2	2	
218	8	99.62	33 47.815	3.2788	−14 30 35.20	.108	2	2	
224	6	98.70	34 22.165	3.0797	− 0 30 12.08	.138	2	2	Pr. Mo. +ˢ.014 +0″.03
223	3.6	98.73	34 33.031	3.3168	−17 6 51.04	.147	3	3	Fund. B. J.
223		99.66	33.073		50.81		4	4	
226	7¼	98.74	35 0.477	3.3503	−19 20 54.88	.171	2	2	
230	7¾	98.75	35 50.983	3.3966	−22 22 57.31	.215	2	2	
231	7½	99.64	35 54.368	3.3922	−22 7 1.85	.217	2	2	
232	7¼	99.69	35 59.887	3.2877	−15 17 46.76	.222	2	2	
235	6	98.72	36 6.672	3.2757	−14 29 36.59	.227	2	2	Pr. Mo. −ˢ.011 −0″.31
233	6¾	99.66	36 10.310	3.3625	−20 15 38.95	.231	2	2	
234	5¼	99.65	36 19.120	3.4172	−23 42 55.76	.239	2	2	Pr. Mo. +ˢ.005 −0″.09
239	7½	98.68	36 48.986	3.0742	− 0 6 32.08	.263	2	2	
238	5	99.68	37 4.479	3.3464	−19 19 19.46	.277	2	2	
240	7¾	99.62	37 9.281	3.1952	− 8 55 13.81	.281	2	2	
244	6¼	98.71	37 37.097	3.2791	−14 51 24.49	.305	2	2	
243	6	98.70	37 37.934	3.3571	−20 4 39.21	.306	2	2	
251	6	98.74	38 33.359	3.2830	−15 12 27.20	.353	2	2	
250	5	98.72	38 59.546	3.5831	−33 28 55.31	.374	2	2	Pr. Mo. −ˢ.001 −0″.10
254	7	98.75	39 10.038	3.1427	− 5 11 21.46	.384	2	2	
257	6¾	99.64	39 35.210	3.2013	− 9 29 46.19	.405	2	2	N. pr.
258	5¼	99.62	39 40.382	3.2019	− 9 32 30.46	.409	2	2	S. fol.
268	6	98.71	40 56.218	3.2035	− 9 44 14.09*	.473	2	2	
270	5.3	98.68	41 9.106	3.2321	−11 49 37.65	.483	2	2	Fund. B. J.
270		99.67	9.146		37.70		4	4	
272	8	99.65	41 9.671	3.1338	− 4 35 18.57	.483	2	2	
271	7¼	98.74	41 18.653	3.2365	−12 9 21.27	.491	2	2	Pr. Mo. ˢ.000 −0″.13
276	3.0	98.70	41 31.296	3.2988	−16 34 51.81	.501	2	2	Fund. B. J.
276		99.63	31.314		51.69		4	4	
—	8	98.72	41 49.034	3.2975	−16 30 56.61	.516	1	1	
275	5¼	99.68	41 52.143	3.5346	−31 21 40.09	.519	2	2	
280	7¾	98.75	42 22.704	3.2971	−16 32 28.23	.544	2	2	Pr. Mo. −ˢ.018 (−0″.11)
287	8¼	99.65	43 15.324	3.0762	− 0 15 44.49	.587	2	2	
286	8¼	99.66	43 28.152	3.3955	−23 17 1.54	.598	2	2	
290	6¾	98.71	43 47.550	3.1496	− 5 52 2.84	.613	2	2	
291	6¾	98.74	44 16.805	3.2476	−13 11 21.01	.637	2	2	
294	7	98.70	44 43.024	3.3046	−17 18 40.14	.659	2	2	
296	8	98.68	44 54.743	3.2951	−16 39 32.82	.668	2	2	Pr. Mo. −ˢ.006 −0″.17
301	7	98.72	45 43.129	3.3978	−23 44 9.32	.707	2	2	Pr. Mo. (?)
303	6½	98.75	46 8.571	3.3278	−19 5 21.02	.728	2	2	
307	7½	98.71	47 11.717	3.3040	−17 32 8.74	.778	2	2	
314	7	98.70	47 32.086	3.1297	− 4 27 44.66	.795	2	2	
315	5	99.69	47 50.656	3.2548	−14 1 21.22	.809	2	2	Pr. Mo. +ˢ.019 0″.00
308	4	99.70	47 52.515	3.6387	−37 50 6.35	.811	2	2	Pr. Mo. + .005 −0 .03
317	8	99.71	48 12.483	3.3449	−20 28 55.21	.827	2	2	10″ dup. S. pr.
320	6.0	98.74	48 56.994	3.1328	− 4 44 42.83	.862	2	2	Fund. 303.
323	6¾	99.69	49 33.414	3.2755	−15 43 47.34	.891	2	2	
324	6	98.70	50 21.775	3.6271	−37 43 39.47	.928	2	2	
326	7	98.74	51 0.136	3.6345	−38 13 18.15	.959	3	3	N. pr.

Star.	Mag.	Epoch.	R. A. 1900.0.	Precess.	Decl. 1900.0.	Precess.	No. Obs.		Notes.
			h m s	s	° ′ ″	″			
P 327	7¼	1899.70	21 51 0.347	+3.6327	−38 8 0.07	+16.959	2	2	
332	7¼	99.69	51 15.635	3.3092	−18 22 18.66	.971	2	2	
329	8	98.80	51 17.177	3.6337	−38 14 9.50	.972	1	1	S. fol.
329		99.71	17.199		8.52		2	2	
333	7¾	98.74	51 32.662	3.3267	−19 39 55.22	.984	2	2	
338	7¼	98.80	52 20.920	3.2699	−15 35 55.36	17.021	2	2	
—	6	98.68	52 55.745	3.1215	− 3 57 59.46	.048	1	1	
345	6	98.75	52 58.747	3.1454	− 5 53 55.65	.050	2	2	Pr. Mo. −ˢ.003 −0″.12
344	7¼	98.79	53 0.886	3.2370	−13 8 36.05	.051	2	2	
343	6.6	98.72	53 9.211	3.3518	−21 39 36.24	.058	2	2	Fund. 303.
340	6	98.70	53 15.258	3.6388	−38 52 23.03	.063	2	2	
348	7½	98.74	54 3.173	3.4613	−29 5 49.58	.099	2	2	
350	7¾	98.74	54 23.801	3.1552	− 6 45 8.23	.115	2	2	
352	7½	98.82	54 49.946	3.2965	−17 51 55.60	.135	2	2	
353	7¼	98.83	54 53.349	3.0673	+ 0 26 46.67	.137	2	2	
351	6	98.80	55 5.572	3.4559	−28 56 1.90	.147	2	2	1″ dup. mean.
354	8	98.80	55 33.208	3.4020	−25 29 22.79	.168	2	2	Error 1 m C. G. C.
356	7¾	99.69	55 49.786	3.2967	−17 59 48.03	.180	2	2	Dup. S. star.
358	6	98.72	55 57.936	3.0712	+ 0 7 28.84	.187	2	2	
364	8	98.70	56 36.173	3.0920	− 1 36 33.69	.215	2	2	
361	6.6	98.75	56 41.579	3.3004	−18 23 0.57	.219	2	2	Fund. 303.
361		99.73	41.600		0.31		2	2	
365	7¾	98.71	56 58.069	3.2876	−17 26 48.05	.231	2	2	S. prec.
365	7½	99.71	56 58.328	3.2876	−17 26 46.68	.231	2	2	N. fol.
371	7¼	98.83	57 24.235	3.0894	− 1 24 3.61	.251	2	2	
367	8	98.79	57 26.903	3.4279	−27 32 1.86	.252	2	2	
366	7¼	98.74	57 30.124	3.4720	−30 23 12.26	.255	2	2	
374	5	98.82	58 0.859	3.1561	− 7 0 20.85	.278	2	2	
376	5	99.69	58 8.505	3.1039	− 2 38 17.37	.281	2	2	Pr. Mo. +ˢ.001 −0″.01
377	7½	98.80	58 35.865	3.3493	−22 15 51.41	.303	2	2	
375	6½	98.80	58 38.044	3.4689	−30 24 3.48	.306	2	2	
379	7	98.83	58 43.058	3.2348	−13 30 12.27	.309	2	2	
378	6¼	98.72	58 55.571	3.4206	−27 18 23.91	.318	2	2	
382	6	98.71	59 38.823	3.0890	− 1 23 24.16	.350	2	2	
381	5	98.82	22 0 5.332	3.6337	−40 1 33.75	.369	2	2	Pr. Mo. −ˢ.003 −0″.11
384	7¾	98.79	0 29.448	3.4504	−29 33 26.33	.387	2	2	
387	3.0	98.74	0 38.860	3.0821	− 0 48 20.53	.393	2	2	Fund. B. J.
387		99.70	38.866		20.67		2	2	
389	4.0	98.68	1 2.215	3.2424	−14 21 17.58	.411	2	2	Fund. B. J.
389		99.69	2.232		17.22		2	2	
393	7	98.75	1 40.867	3.3492	−22 43 43.55	.438	2	2	
397	5	98.70	2 33.050	3.5062	−33 28 35.51	.476	2	2	Pr. Mo. +ˢ.003 −0″.03
398	6½	98.80	2 53.046	3.5074	−33 36 55.92	.490	2	2	
403	7¼	98.82	3 0.210	3.1514	− 6 52 18.58	.495	2	2	
400	7¼	98.80	3 7.003	3.3947	−26 15 31.81	.500	2	2	
407	5	98.79	3 29.923	3.2969	−19 0 32.41	.517	2	2	
412	7¾	98.83	3 33.079	3.0744	− 0 9 4.03	.519	2	2	
414	6¾	98.75	4 9.672	3.1715	− 8 40 38.49	.544	2	2	
410	5¼	98.72	4 17.288	3.4934	−33 2 22.19	.549	2	2	Pr. Mo. +ˢ.035 0″.00
421	6	98.68	5 9.098	3.1220	− 4 23 3.73	.586	2	2	
418	6	98.80	5 11.736	3 2012	−11 18 45.89	.588	2	2	
420	5½	98.80	5 16.754	3.2098	−12 3 25.39	.591	2	2	
2	6¼	98.73	5 20.900	3.1261	− 4 45 30.60	.594	3	3	
419	7	98.70	5 29.512	3.3279	−21 43 25.01	.600	2	2	Pr. Mo. +ˢ.010 −0″.04
7	8¼	98.74	6 48.525	3.2392	−14 43 7.88	.655	2	2	S. pr.
9	6	98.75	7 2.228	3.2385	−14 41 11.13	.666	2	2	N. fol.
14	6½	98.79	7 27.356	3.1497	− 6 57 48.52	.682	2	2	Pr. Mo. (?)
17	6½	98.82	7 31.390	3.1302	− 5 12 49.84	.685	1	1	
17	6¾	99.70	31.422		49.05		2	2	
20	7	98.80	8 5.599	3.2108	−12 25 13.50	.708	2	2	

Star.	Mag.	Epoch.	R. A. 1900.0.	Precess.	Decl. 1900.0.	Precess.	No. Obs.		Notes.
			h m s	s	° ′ ″	″			
P 19	6	1898.83	22 8 7.438	+3.3742	−25 40 34.88	+17.710	2	2	
18	6¼	98.80	8 32.024	3.6325	−41 51 17.92	.726	2	2	Pr. Mo. +ˢ.050 −0″.73
21	6	98.70	8 38.808	3.4084	−28 15 45.16	.731	2	2	Pr. Mo. + .001 −0 .01
—	7	98.82	8 41.366	3.1288	− 5 8 23.43	.733	2	2	
22	5½	98.79	8 46.686	3.3193	−21 34 18.44	.741	2	2	N. pr.
25	8¼	98.68	9 33.723	3.3811	−26 27 50.01	.768	2	2	
23	6	98.82	9 35.508	3.6274	−41 50 40.41	.770	1	1	Pr. Mo. +ˢ.003 +0″.02
23	5½	99.70	35.570		39.27		2	2	
35	7½	98.74	9 58.659	3.1385	− 6 4 54.01	.785	2	2	
31	5	98.83	10 25.555	3.6290	−42 7 29.28	.803	2	2	
38	8½	98.72	10 50.246	3.2684	−17 42 11.43	.820	2	2	
37	6	98.75	11 0.489	3.3765	−26 23 46.02	.827	2	2	
43	6¾	98.80	11 24.496	3.0950	− 2 5 40.04	.843	2	2	
41	5½	98.73	11 26.800	3.2172	−13 19 48.32	.844	3	3	
44	4.3	98.70	11 33.405	3.1614	− 8 16 53.11	.849	2	2	Fund. B .J.
44		99.72	33.419		52.49		4	4	
46	6	98.80	11 35.816	3.1751	− 9 32 18.14	.851	2	2	
48	5½	98.79	11 53.248	3.1354	− 5 53 11.85	.862	2	2	
56	5	98.68	13 38.742	3.2195	−13 48 20.19	.931	2	2	
59	8	98.74	14 9.944	3.1671	− 9 0 23.72	.952	2	2	
63	6	98.70	14 56.185	3.1593	− 8 19 24.14	.982	2	2	
67	5.7	98.79	16 5.356	3.3105	−22 5 58.31	18.026	8	8	Fund. 303.
68	7½	98.74	16 9.788	3.1420	− 6 44 46.41	.028	2	2	S. pr.
72	3.4	98.77	16 29.425	3.0920	− 1 53 28.44	.041	4	4	Fund. B. J.
72		99.70	29.492		28.71		2	2	
71	7¼	98.79	16 32.574	3.1411	− 6 41 5.20	.043	2	2	N. fol.
78	5½	98.68	17 56.533	3.3445	−25 16 5.05	.096	2	2	
81	6¼	98.70	18 17.428	3.1503	− 7 42 1.04	.109	2	2	
83	7¼	98.72	18 50.258	3.1807	−10 42 12.11	.130	2	2	
85	6	98.74	18 54.374	3.1261	− 5 20 34.31	.132	2	2	
86	6.2	98.79	19 5.697	3.2152	−14 2 10.60	.139	9	9	Fund. 303.
84	6¾	98.79	19 10.798	3.3674	−27 21 57.45	.142	2	2	
89	7	98.75	19 26.258	3.0895	− 1 41 39.99	.152	2	2	
91	6	98.80	20 38.896	3.3250	−24 11 26.54	.197	2	2	
93	7¼	98.74	21 8.325	3.2463	−17 14 58.53	.215	2	2	N. pr. Pr. Mo. +ˢ.016 +0″.02
94	6½	98.80	21 8.768	3.2463	−17 15 2.95	.215	2	2	S. fol. Pr. Mo. + .014 −0 .02
98	7½	98.70	21 23.008	3.1886	−11 44 12.09	.222	2	2	
102	5½	98.68	22 47.628	3.5285	−39 38 15.99	.275	2	2	Pr. Mo. +ˢ.002 −0″.18
104	4	98.82	23 17.625	3.6016	−44 0 23.82	.293	2	2	Pr. Mo. + .001 −0 .01
111	6½	98.73	23 40.807	3.0778	− 0 31 53.07	.307	3	3	N. pr. Pr. Mo. +ˢ.011 +0″.04
111	6	99.71	23 40.991	3.0778	− 0 31 55.15	.307	2	2	S. fol. Pr. Mo. +ˢ.011 +0″.04
108	4½	98.83	23 47.097	3.6035	−44 15 40.69	.311	2	2	
110	7½	98.72	23 47.845	3.1712	−10 14 59.59	.311	2	2	S. pr.
114	8¼	98.75	24 1.828	3.1703	−10 10 26.46	.319	2	2	N. fol.
112	5	98.79	24 10.393	3.3567	−27 37 7.48	.324	2	2	Pr. Mo. (?)
117	6½	98.80	24 55.775	3.2181	−15 5 49.50	.351	2	2	
119	7¼	98.82	25 18.083	3.3194	−24 40 50.66	.364	2	2	
118	6½	98.80	25 20.231	3.3412	−26 35 3.91	.366	2	2	
122	4.8	98.79	25 21.288	3.1789	−11 11 23.11	.367	2	2	Fund. 303.
125	8	98.76	25 35.124	3.1781	−11 8 18.12	.374	1	1	S. pr.
125	7¾	99.73	35.156		18.21		2	2	
126	8	98.74	25 48.333	3.1776	−11 7 7.07	.382	1	1	N. fol.
126	8	99.71	48.312		6.72		2	2	
123	4	98.80	25 49.225	3.4177	−32 51 32.48	.383	2	2	N. pr.
124	8	98.83	25 49.638	3.4178	−32 52 2.13	.383	2	2	S. fol.
130	6½	98.73	26 23.184	3.1800	−11 25 4.77	.402	3	3	
133	7¾	98.72	26 49.474	3.2056	−14 6 35.97	.417	2	2	9 mag. fol. 2ˢ.6
138	7¼	98.80	27 39.000	3.2432	−18 0 54.99	.446	2	2	
142	6¼	98.75	28 50.581	3.1652	−10 7 27.27	.486	2	2	
144	6	98.74	28 53.612	3.0916	− 2 5 20.59	.488	2	2	

Star.	Mag.	Epoch.	R. A. 1900.0.	Precess.	Decl. 1900.0.	Precess.	No. Obs.		Notes.
			h m s	s	° ′ ″	″			
P 143	5.5	1898.78	22 29 13.448	+3.2730	−21 13 13.86	+18.499	4	4	Fund. 303.
143		99.73	13.460		13.74		2	2	
145	6¼	98.72	29 28.895	3.0720	+ 0 4 51.00	.508	2	2	Pr. Mo. (?)
146	6	98.70	30 6.418	3.3057	−24 30 29.75	.529	2	2	
151	3.8	98.80	30 13.027	3.0784	− 0 37 58.91	.532	2	2	Fund. B. J.
151		99.71	13.058		59.05		2	2	
149	6	98.79	30 25.792	3.2380	−17 58 35.33	.540	2	2	
148	7	98.75	30 27.342	3.2728	−21 27 6.00	.541	2	2	
147	6¼	98.82	30 38.905	3.5159	−41 5 54.80	.547	2	2	N. pr.
153	6	98.68	30 57.835	3.3914	−32 10 51.13	.557	2	2	S. pr.
154	7½	98.83	31 1.384	3.3910	−32 9 34.74	.559	2	2	N. fol.
152	5½	98.80	31 8.737	3.5137	−41 6 25.52	.564	2	2	S. fol.
155	7¾	98.79	31 20.265	3.2725	−21 36 29.83	.570	2	2	
160	7¼	98.74	32 3.921	3.2638	−20 53 45.20	.594	2	2	
166	5	98.74	32 34.624	3.1140	− 4 44 37.35	.610	2	2	Pr. Mo. −ˢ.006 −0″.11
162	8	98.72	32 34.943	3.3369	−27 57 48.14	.610	2	2	Pr. Mo. (?)
170	7	98.70	34 0.296	3.1640	−10 32 53.51	.657	2	2	
171	7¾	98.75	34 4.802	3.1080	− 4 7 37.26	.659	2	2	
172	6½	98.68	34 47.632	3.3665	−31 10 28.10	.682	2	2	Pr. Mo. −ˢ.009 −0″.22
176	7	98.80	34 51.424	3.1573	− 9 52 53.84	.684	2	2	Pr. Mo. + .012 +0 .03
178	7¼	98.74	34 59.514	3.1327	− 7 3 16.97	.688	2	2	
175	4	98.73	35 7.519	3.3253	−27 33 54.60	.692	2	3	Pr. Mo. −ˢ.001 −0″.01
183	6¾	98.72	35 37.463	3.1070	− 4 4 28.71	.708	2	2	
182	7½	98.80	35 54.647	3.3254	−27 46 44.19	.717	2	2	
188	8	98.79	36 44.160	3.1620	−10 38 53.65	.743	2	2	
187	6	98.75	36 48.425	3.3455	−29 52 59.98	.745	2	2	
191	7½	98.70	36 56.039	3.1058	− 3 59 45.54	.749	2	2	
193	5	98.82	37 42.071	3.4948	−41 56 8.67	.773	2	2	
198	6¾	98.80	37 45.564	3.1608	−10 37 35.37	.774	2	2	
200	6¾	98.80	37 49.067	3.1456	− 8 50 5.62	.777	2	2	4″ dup. s. f.
201	8	98.74	37 59.354	3.1364	− 7 44 19.40	.782	2	2	
202	6	98.72	38 0.895	3.1342	− 7 29 11.47	.782	2	2	
204	8½	98.74	38 12.319	3.1462	− 8 56 30.98	.788	2	2	
203	5.3	98.79	38 12.407	3.2368	−19 21 12.54	.788	2	2	Fund. 303.
206	8	98.68	39 22.169	3.1386	− 8 8 31.33	.824	2	2	S. pr.
208	8	98.70	39 52.675	3.1378	− 8 5 27.44	.839	2	2	N. fol.
207	6½	98.75	40 3.272	3.2933	−25 45 46.42	.844	2	2	
209	7½	98.80	40 5.549	3.1546	−10 10 11.37	.845	2	2	S. pr. dup.
213	8	98.72	41 4.389	3.1541	−10 13 21.49	.874	2	2	
216	6	98.74	42 10.868	3.2359	−20 8 6.31	.907	2	2	Pr. Mo. −ˢ.008 −0″.21
218	5½	98.79	42 24.212	3.1883	−14 35 1.19	.914	2	2	
219	7½	99.71	42 40.590	3.1095	− 4 44 52.42	.922	2	2	S. pr. Pr. Mo. −ˢ.014 −0″.31
219	8	98.70	42 40.868	3.1095	− 4 44 51.82	.922	2	2	N. fol. Pr. Mo. − .014 −0 .31
220	8¼	98.74	42 43.241	3.1095	− 4 45 22.79	.923	2	2	S. fol.
221	8	98.75	42 57.034	3.2352	−20 13 32.12	.930	2	2	Pr. Mo. (?)
223	6	98.68	43 14.396	3.1588	−11 5 1.19	.938	1	2	
223		99.73	14.511		1.08		2	2	
225	4.0	98.77	44 17.863	3.1818	−14 7 13.57	.968	4	4	Fund. B. J.
224	6¼	98.80	44 24.887	3.3574	−33 20 2.20	.971	2	2	
228	7¼	98.80	45 1.095	3.1330	− 7 59 20.03	.988	2	2	
227	6½	98.74	45 20.782	3.4278	−39 41 12.85	.997	2	2	
230	7	98.74	45 33.612	3.1315	− 7 50 28.38	19.003	2	2	
229	6	98.70	45 50.156	3.3188	−30 3 57.23	.011	2	2	
234	5½	98.72	46 58.108	3.3489	−33 24 21.02	.043	2	2	5″ dup. Pr. Mo. −ˢ.005 −0″.02
235	4.0	98.74	47 23.826	3.1321	− 8 6 41.96	.055	3	4	Fund. B. J.
239	6	98.74	48 12.759	3.1614	−12 8 53.81	.076	2	2	
242	7½	98.74	48 33.367	3.1099	− 5 11 20.83	.085	2	2	
243	7	98.70	48 50.667	3.1649	−12 43 17.40	.093	2	2	
245	3.0	98.75	49 20.626	3.1918	−16 21 9.21	.106	2	2	Fund. B. J.
246	5½	98.79	49 21.753	3.1278	− 7 44 10.10	.107	2	2	

Star.	Mag.	Epoch.	R. A. 1900.0.	Precess.	Decl. 1900.0.	Precess.	No. Obs.		Notes.
			h m s	s	° ′ ″	″			
P 247	5¼	1898.80	22 49 28.070	+3.1950	−16 48 7.37	+19.110	2	2	Pr. Mo. −ˢ.017 −0″.09
250	6	98.80	49 59.766	3.1116	− 5 31 14.13	.124	2	2	
251	5	98.72	50 24.716	3.3331	−33 4 26.84	.134	2	2	
254	6.7	98.76	52 6.570	3.1092	− 5 20 40.14	.178	4	4	Fund. 303.
253	1.3	98.76	52 7.485	3.2994	−30 9 7.90	.179	4	4	Fund. B. J.
256	6½	98.74	53 1.065	3.3531	−36 3 19.33	.202	2	2	
259	8¼	98.72	53 19.750	3.1065	− 5 2 13.32	.209	2	2	
262	5½	98.79	54 7.654	3.2915	−29 59 54.77	.229	2	2	
264	6¼	98.76	54 19.774	3.1642	−13 36 24.30	.234	2	2	
266	6	98.80	54 19.911	3.0755	+ 0 25 44.83	.235	2	2	
269	7½	98.82	54 40.041	3.0923	− 2 58 35.10	.243	2	2	
267	6	98.80	54 40.983	3.2536	−25 41 53.80	.243	2	2	
268	7	98.83	54 53.202	3.2611	−26 41 8.17	.248	2	2	Pr. Mo. (?) S. pr.
270	8½	98.79	54 59.914	3.2606	−26 40 8.44	.251	2	2	N. fol.
272	7	98.70	55 6.535	3.1347	− 9 24 57.93	.253	2	2	
274	7	98.74	55 30.166	3.0750	− 0 21 3.95	.263	2	2	
277	6½	98.74	56 0.431	3.2316	−23 19 38.66	.275	2	2	
278	6¼	98.80	56 11.807	3.1217	− 7 35 53.06	.280	2	2	
279	6¾	98.72	56 21.114	3.1064	− 5 14 55.75	.284	2	2	
281	(6.4)	98.68	57 21.100	3.1177	− 7 6 39.30	.307	2	2	
282	6	98.70	57 57.873	3.3258	−35 17 24.28	.322	2	2	Pr. Mo. (?)
289	5.9	98.76	59 56.911	3.1228	− 8 14 0.89	.367	4	4	Fund. 303.
291	7	98.74	23 0 6.344	3.1231	− 8 17 38.87	.371	2	2	S. fol.
294	7	98.72	0 40.282	3.1237	− 8 28 35.01	.384	2	2	
296	4½	98.82	1 14.812	3.4008	−44 3 37.21	.396	2	2	Pr. Mo. −ˢ.008 −0″.05
299	(4.4)	98.68	1 18.648	3.2255	−24 17 0.69	.398	2	2	Pr. Mo. + .003 0 .00
298	6	98.70	1 19.650	3.3511	−39 25 59.46	.398	2	2	
302	7½	98.75	1 59.755	3.1212	− 8 14 2.31	.413	2	2	
305	5½	98.80	2 56.573	3.2581	−29 21 50.02	.434	2	2	
307	8¼	98.74	3 14.316	3.1279	− 9 33 0.54	.440	2	2	
313	4.0	98.70	4 6.901	3.2012	−21 42 55.06	.459	2	2	Fund. B. J.
314	6	98.83	4 24.359	3.3764	−43 24 10.06	.465	2	2	
317	5	98.72	4 34.443	3.2086	−22 59 58.94	.468	2	2	
315	6	98.80	4 35.761	3.3521	−41 7 56.86	.469	2	2	
2	7½	98.68	5 28.902	3.1086	− 6 30 11.11	.487	2	2	
12	7½	98.70	7 45.913	3.1266	−10 6 50.35	.533	2	2	
17	7¼	98.74	8 57.766	3.0891	− 3 10 44.11	.557	2	2	
19	4	98.72	9 8.514	3.1067	− 6 35 16.87	.560	2	2	Pr. Mo. +ˢ.001 −0″.21
16	8	98.68	9 9.535	3.2358	−29 0 10.30	.561	2	2	
18	6	98.74	9 25.967	3.3330	−41 38 52.33	.566	2	2	Pr. Mo. (?)
22	5	98.70	10 39.069	3.1212	− 9 37 57.24	.589	2	2	Pr. Mo. +ˢ.024 −0″.03
25	7	98.75	11 17.312	3.2305	−29 13 46.15	.601	2	2	
24	6¾	98.80	11 19.159	3.3242	−41 44 25.84	.602	2	2	
30	5	98.79	11 39.972	3.1134	− 8 16 18.92	.608	2	2	
29	6¼	98.74	11 46.619	3.2274	−28 58 52.97	.610	2	2	
32	6	98.80	12 38.885	3.3143	−41 22 2.40	.625	2	2	Pr. Mo. (?)
33	5	98.72	12 42.281	3.1197	− 9 43 41.93	.627	2	2	
35	7½	98.68	13 7.786	3.2234	−29 1 20.26	.634	2	2	
36	5	98.74	13 25.537	3.2485	−33 4 37.61	.639	2	2	Pr. Mo. −ˢ.003 −0″.07
37	7	98.70	13 41.959	3.2210	−28 56 6.60	.644	2	2	
40	5½	98.75	13 45.542	3.1207	−10 9 26.73	.645	2	2	
41	8	98.80	13 50.849	3.1394	−13 59 57.12	.647	2	2	N. pr. Pr. Mo. +ˢ.018 −0″.09
42	6	98.79	13 51.077	3.1394	−14 0 10.69	.647	2	2	S. fol. Pr. Mo. + .019 −0 .12
46	5½	98.80	14 12.846	3.0991	− 5 40 15.04	.653	2	2	Pr. Mo. +ˢ.011 0″.00
55	6	98.74	15 55.892	3.2060	−27 32 4.09	.682	2	2	Pr. Mo. −ˢ.004 (?) −0″.05 (?)
61	5	98.70	17 24.652	3.1416	−15 35 17.47	.707	2	2	
63	4.3	98.74	17 43.165	3.1651	−20 38 47.25	.712	6	6	Fund. 303.
63		99.73	43.131		47.53		2	2	
64	7½	98.72	17 49.929	3.1217	−11 19 12.34	.713	2	2	Pr. Mo. +ˢ.030 +0″.18
66	6½	98.82	18 16.446	3.3038	−43 40 24.54	.721	2	2	

Star.	Mag.	Epoch.	R. A. 1900.0.	Precess.	Decl. 1900.0.	Precess.	No. Obs.		Notes.
			h m s	s	° ′ ″	″			
P 68	6½	1898.74	23 18 24.088	+3.0738	− 0 15 28.32	+19.723	2	2	
69	7¾	98.79	18 34.461	3.1117	− 9 0 30.48	.725	2	2	N. fol. star.
70	6¼	98.80	18 48.004	3.1708	− 22 19 17.02	.729	2	2	Pr. Mo. −ˢ.006 −0″.11
76	8	98.70	20 37.614	3.1612	− 21 9 39.06	.757	2	2	N. pr. Pr. Mo. (?)
78	4½	98.72	20 47.565	3.1610	− 21 11 24.58	.759	2	2	S. fol. Pr. Mo. (?)
79	8	98.75	21 7.332	3.1269	− 13 30 2.07	.764	2	2	
80	8¼	98.74	21 15.522	3.1624	− 21 44 25.02	.766	2	2	
82	6	98.68	21 19.253	3.1648	− 22 17 26.99	.767	2	2	
85	7¼	98.74	22 14.085	3.1253	− 13 28 46.91	.780	2	2	
87	6	98.79	22 38.710	3.2309	− 36 5 43.36	.786	2	2	
90	6½	98.80	22 52.947	3.1186	− 11 59 59.19	.789	2	2	
95	7	98.70	24 18.978	3.0812	− 2 20 29.93	.809	2	2	
96	6¾	98.74	24 21.879	3.0911	− 5 4 38.54	.810	2	2	Pr. Mo. +ˢ.014 −0″.25
97	6½	98.75	24 22.535	3.0784	− 1 35 10.00	.810	2	2	
99	6½	98.82	25 10.334	3.2584	− 42 32 17.45	.821	2	2	Pr. Mo. R. A. (?)
103	6¾	98.79	26 21.514	3.0886	− 4 38 1.50	.836	2	2	Pr. Mo. +ˢ.012 −0″.21
104	6¼	98.80	26 27.517	3.1512	− 21 55 17.74	.838	1	2	
104	6½	99.73	27.508		17.27		2	2	
102	6¾	98.83	26 28.124	3.2501	− 42 18 16.43	.838	2	2	
105	6¾	98.80	26 34.234	3.1504	− 21 48 4.19	.839	2	2	
106	7	98.75	26 39.722	3.1157	− 12 30 1.18	.840	2	2	
108	6¼	98.82	26 49.662	3.0782	− 1 38 17.29	.842	2	2	
109	7	98.74	27 1.579	3.1138	− 12 5 46.55	.845	2	2	
111	6	98.70	27 36.584	3.2219	− 38 22 16.75	.852	2	2	Pr. Mo. +ˢ.005 −0″.02
114	4.6	98.72	28 2.668	3.1458	− 21 28 1.65	.857	2	2	Fund. 303.
116	6¼	98.74	29 0.505	3.0784	− 1 47 58.66	.869	2	2	
117	6¾	98.82	29 27.510	3.2398	− 43 14 13.51	.874	2	2	S. pr.
122	6	98.79	29 37.140	3.1227	− 15 47 47.18	.876	2	2	
120	5	98.80	29 41.793	3.2381	− 43 10 4.47	.877	2	2	Pr. Mo. ˢ.000 0″.00
123	7	98.75	29 54.453	3.0980	− 8 13 49.93	.879	2	2	
126	6.5	98.79	30 22.548	3.0970	− 8 1 4.39	.885	6	6	Fund. 303.
128	6	98.68	30 30.139	3.1214	− 15 51 4.05	.886	2	2	Var. (?)
129	8½	98.70	30 37.875	3.0916	− 6 18 6.23	.887	2	2	
130	6½	98.72	30 54.534	3.1606	− 27 25 46.37	.891	2	2	
131	7¾	98.74	31 26.206	3.1530	− 25 47 32.32	.896	2	2	
133	6	98.75	32 28.473	3.1115	− 13 36 52.58	.908	2	2	
137	7	98.74	32 51.176	3.1170	− 15 38 44.55	.911	2	2	Pr. Mo. +ˢ.003 −0″.10
140	8	98.72	33 28.798	3.1333	− 21 25 16.26	.918	2	2	
143	5	98.74	34 35.889	3.1117	− 14 46 29.94	.929	2	2	
148	5¾	98.82	35 23.379	3.1645	− 32 37 32.79	.937	2	2	N. pr. Pr. Mo. −ˢ.014 −0″.04
149	7	98.79	35 23.798	3.1236	− 19 32 31.60	.937	2	2	Pr. Mo. +ˢ.023 −0″.06
150	7½	98.74	35 52.196	3.1627	− 32 37 35.85	.941	2	2	S. fol.
153	5¾	98.75	35 58.367	3.1031	− 12 14 6.88	.942	2	2	
154	5	98.80	36 23.398	3.1189	− 18 34 46.87	.946	1	2	
154	5¼	99.73	23.356		47.53		2	2	
156	5	98.82	36 34.373	3.1180	− 18 22 16.67	.947	2	2	
157	7½	98.72	36 43.792	3.0882	− 6 32 14.29	.949	2	2	Pr. Mo. −ˢ.010 −0″.14
159	4.6	98.74	37 32.189	3.1080	− 15 5 52.08	.956	2	2	Fund. B. J.
161	7¼	98.79	37 38.189	3.1001	− 11 52 57.88	.957	2	2	
165	5	98.68	39 0.921	3.1144	− 18 49 54.69	.968	2	2	
168	8	98.75	39 11.005	3.0723	+ 0 9 29.54	.969	2	2	
167	7½	98.70	39 16.804	3.1337	− 26 48 4.41	.971	2	2	Dup. S. fol.
169	8	98.72	39 32.897	3.0916	− 9 1 3.24	.972	2	2	
174	7¾	98.74	40 11.853	3.1020	− 14 14 14.54	.977	2	2	
176	6¼	98.83	40 44.666	3.1694	− 40 44 14.05	.981	2	2	
177	6¾	98.74	40 49.291	3.1117	− 19 14 3.40	.982	2	2	N. prec.
178	7½	98.79	40 49.779	3.1006	− 14 0 33.75	.982	2	2	
179	8	98.80	40 52.740	3.0733	− 0 17 30.46	.982	2	2	2″ dup.
180	7¼	98.82	41 8.846	3.1000	− 13 55 11.25	.984	2	3	
L 9585	7	99.76	41 14.854	3.1715	− 42 6 48.16	.985	2	2	Pr. Mo. +ˢ.010 −0″.85

Star.	Mag.	Epoch.	R. A. 1900.0.	Precess.	Decl. 1900.0.	Precess.	No. Obs.		Notes.
			h m s	s	° ′ ″	″			
P 183	7	1898.75	23 41 27.426	+3.0728	− 0 1 28.23	+19.986	2	2	
185	5¾	98.80	42 6.910	3.0957	−12 27 50.70	.991	2	2	Pr. Mo. −ˢ.008 −0″.10
186	8¼	98.70	42 14.943	3.1163	−22 49 43.57	.992	2	2	
188	6	98.72	42 48.000	3.0785	− 3 19 2.94	.996	2	2	
189	7¼	98.74	43 20.358	3.1070	−19 26 22.66	.999	2	2	
190	6	98.80	43 24.068	3.0845	− 6 56 8.57	20.000	1	2	
190	6¼	99.73	24.162		8.56		2	2	
192	4.4	98.76	43 43.074	3.1247	−28 41 0.02	.001	4	4	Fund. B. J.
194	6¾	98.74	44 15.572	3.1100	−22 10 13.28	.005	2	2	
197	5¾	98.82	44 20.195	3.0719	+ 0 31 15.54	.005	2	2	
196	5¾	98.79	44 21.662	3.0996	−16 24 59.10	.005	2	2	
199	7½	98.80	44 47.467	3.0963	−14 53 30.58	.008	2	2	
200	6.1	98.70	45 5.079	3.0889	−10 31 56.09	.010	2	2	Fund. 303.
201	6½	98.75	45 17.700	3.0959	−15 8 9.05	.011	2	2	
203	6	98.72	45 23.744	3.0955	−14 57 24.89	.011	2	2	
207	5.0	98.76	46 11.455	3.1012	−19 27 54.88	.016	4	4	Fund. 303.
210	6	98.74	47 21.784	3.0922	−14 48 26.36	.022	2	2	
215	6	98.75	47 47.287	3.0773	− 3 42 38.12	.024	2	2	
222	6½	98.68	48 10.671	3.1046	−24 47 7.28	.025	2	2	Pr. Mo. +ˢ.001 −0″.01
225	6¼	98.74	49 24.049	3.1263	−40 51 27.47	.031	2	2	Pr. Mo. + .034 0 .00
227	6½	98.70	49 39.519	3.0732	− 0 26 48.64	.032	2	2	
234	7½	98.72	51 22.284	3.1019	−30 3 58.25	.038	2	2	
241	8¼	98.70	53 1.708	3.0759	− 4 32 10.66	.043	2	2	Pr. Mo. (?)
243	6½	98.74	53 12.557	3.0844	−16 24 14.56	.043	2	2	
244	5.3	98.78	53 33.177	3.0754	− 4 6 38.65	.044	8	8	Fund. 303.
248	6	98.72	54 19.502	3.0919	−30 2 31.21	.046	2	2	
249	6¾	98.79	54 32.819	3.0763	− 6 26 53.84	.046	2	2	
252	7¼	98.80	55 55.347	3.0754	− 6 23 29.67	.049	2	2	N. pr.
253	7¾	98.70	55 59.938	3.0754	− 6 25 51.30	.049	2	2	S. fol.
254	6	98.75	56 33.529	3.0900	−40 42 19.90	.050	2	2	
255	5	98.74	56 41.925	3.0739	− 3 35 2.65	.050	2	2	
256	5	98.74	56 49.937	3.0749	− 6 34 11.46	.050	2	2	
258	7	98.68	56 54.942	3.0738	− 3 19 22.61	.050	2	2	
259	5½	98.79	57 12.348	3.0822	−30 16 40.12	.051	2	2	
262	6	98.82	57 49.465	3.0775	−20 36 18.41	.051	2	2	
264	4.3	98.76	58 37.001	3.0754	−17 53 33.27	.052	4	4	Fund. 303.
264		99.73	37.041		33.82		2	2	
266	6	98.70	59 22.997	3.0734	−11 3 57.57	.052	2	2	
270	6	98.78	59 56.179	3.0727	− 1 3 30.05	.052	2	2	

REFERENCE STARS FOR EROS.

(1) **The First List.** When the asteroid Eros came to opposition, late in 1900, extensive preparations were made to observe it, for the determination of the Solar Parallax. The program made up at the International Astrophotographic Conference, included the determination of the comparison stars, used in the direct measures, by means of photographs. These were to include a sufficiently large number of Reference stars, the places of which it was designed to obtain by meridian circle observations. The definitive places of the small planet are then to be derived by three successive steps: the determination of the Reference stars, by the meridian circle; the derivation of the places of the comparison stars, by measures of photographs; and finally the places of Eros are to be obtained by direct micrometrical measures upon faint stars, near the planet, or by measures of photographs which contain such faint stars, and the planet.

The direct measures of the position of Eros were to be made both on the meridian, to derive the daily motion; and at large hour angles, for differential determinations of Parallax. The observations of the Reference stars were undertaken, here, soon after the receipt of the request for coöperation. The observations were promptly reduced, and the results were published in the first two of the series of Bulletins, issued by this Observatory. The places of the two lists of stars are here printed separately, as it is believed that this form will be most convenient.

The first list contained 319 stars, and 6 additional stars were observed with the list, making 325 in all. The second list contained 352 stars, one of which was, however, a variable, and too faint to observe. One extra star was added to this list. For the first list, eight Fundamental stars were used, though four stars only were observed for a small part of the list. For the second list twenty-three Fundamental stars were used, the number observed each night depending upon the length, and varying from four, for one hour, up to eight for a full night of four to five hours.

Observing was begun September 17, 1900, and the first list was finished December 7. Meantime the second list had been received, and it was possible to observe some of the overlapping region in 2^h R. A. without interference with the program for the first list. The complete observation of both was terminated January 29, 1901.

In this period of four and a half months, slightly more than 2000 observations were obtained, including those of Circumpolar stars and of Nadirs. The conditions were decidedly above the average, for the winter, at this Observatory. Excepting for interruptions by clouds, the work was planned for 48 nights, giving two observations to each star. The interruptions necessitated the use of 6 additional nights to complete the broken programs, making 54 in all. These were distributed:

September . .	10 nights,	450	observations.
October . . .	14 "	400	"
November . .	12 "	400	"
December . .	11 "	470	"
January . . .	7 "	280	"
Total . .	54 "	2000	"

The maximum number of observations was 90, for a night; and the average was 41 for unbroken nights. The work could have probably been somewhat condensed, if both lists had been available for observation, at the start. The first list is less than two hours in length, while the second list extends through four hours. But the first list is very much crowded in portions, one minute of Right Ascension, $2^h\ 42^m$ for instance, containing 12 stars, while the minutes immediately preceding and following contain 10 and 7, respectively. In the second list the stars are sparsely distributed, with an average of less than 90 per hour.

The time required for observation has been sensibly diminished by the assistance of Dr. R. S. CRAWFORD, in reading the microscopes, upon 36 nights, which included 1400 observations. His services were available up to December 12, 1900.

The reductions, and discussion of the observations were entirely completed, and the results prepared for publication in the form of the Bulletins, at the end of February, 1901. Including one and a half months' full time of a computor, the reductions have covered seven months. Dr. CRAWFORD computed the reductions to mean place, for the first list, and checked the observing means. The remainder was accomplished without assistance.

The probable errors of a single observation have been derived from the comparison of the separate determinations of the entire lists.

For the first list:

P. E. 1 obs. R. A. $= \pm 0^s.023 = \pm 0^s.016 \sec \delta$.
P. E. 1 obs. Decl. $= \pm 0''.17$, not including Division Error.

For the second list:

P. E. 1 obs. R. A. $= \pm 0^s.023 = \pm 0^s.021 \sec \delta$.
P. E. 1 obs. Decl. $= \pm 0''.22$, not including Division Error.

Combining the probable error of Graduation, ±0″.15, with the determinations in Declination, there result the following, for the mean:

First list:

P. E. mean of 2 obs. R. A. = ±0ˢ.011 sec δ = ±0″.17.
P. E. mean of 2 obs. Decl. = ±0″.19.

Second list:

P. E. mean of 2 obs. R. A. = ±0ˢ.015 sec δ = ±0″.22.
P. E. mean of 2 obs. Decl. = ±0″.21.

The probable error of the final determination is thus, very closely ±0″.20 in each coördinate, and the place of a star given by these observations would accordingly have a probable error of less than ±0″.3.

(2) **Comparison of Fixed and Movable Circles.** The value of the probable error of Graduation used above, ±0″.15, is that derived in the measurement of the 1° arcs, the results of which are given in Volume IV, Lick Observatory Publications, page 45. It is fully confirmed in this series, by the comparison of the observations of the Fundamental stars, made simultaneously with both circles. Upon sixteen nights, during the observation of the first list, the Fundamental stars, Circumpolar stars, and Nadirs were read upon both circles. The fixed circle was West, and all the observations of the same object were made upon the same circle divisions. The movable circle was East, and was shifted each night, the total arc covered being 134 degrees.

The comparison of the results for the two circles would check the existence of any abnormal division errors; and it furnishes a test of the average size of the errors. The average difference between the resulting observed Declinations, which is ±0″.13, may be assumed to represent very nearly the average graduation error of the fixed circle.

The direct comparison of 207 double circle readings, upon 16 nights, gives as the probable error of one circle, ±0″.17. This includes division error, and error of microscope reading. Allowing ±0″.08 for the last term, there remains ±0″.15 for division error of one circle.

Again, the probable error of an observation of Declination, in the series of 30 nights, circle West, is ±0″.19. The corresponding error upon 16 nights, circle East, is ±0″.24. The last result includes the effect of graduation error, and the comparison of the two leaves ±0″.15 for the division error of the East circle.

The observations of the Latitude, made with both circles, will include the probable error of the Nadir. From 128 single determinations, eight Fundamental stars upon 16 nights, the probable error of one determination circle East is ±0″.29. The similar result from observations circle West is ±0″.21. The difference, ±0″.20, is due to the combined division error of Nadir and star settings, circle East, or ±0″.14 for each.

The difference between the mean values of the Latitude, circles West and East, may be assumed to represent very nearly the division error of the Nadir setting, fixed circle West. This difference is +0".12 (±0".04). The results for each star are given in the Latitude Table below. And the comparison of the two circles, upon four nights, will precede the results of the second list of stars.

(3) **The Fundamental Stars.** The places of the list of stars below, used as Fundamental for the first list of Eros stars, have been taken from *Newcomb's Catalogue of Fundamental Stars* for 1900, and the proper motions have been included in the reductions. The mean Declination of the group is +49°, very close to the mean Declination of the stars to be determined. The table includes the observed corrections to the adopted places, the corrections to Declinations being given for both circles. For fixed circle West, the results of the full series of 30 nights, and the results for the 16 nights when both circles were read, are tabulated separately, for comparison with circle East.

The observed position of each Fundamental star is referred strictly to the mean of the remaining seven stars. The entire group of eight Fundamentals was observed on 30 nights; and the last four only on 8 nights, for the reduction of 15 stars of the list. The observed corrections indicate but small differences, between the mean of all eight, and the mean of the last four Fundamentals, and no corrections have been applied in the reductions. The last star is double, but while the faint companion is always visible here under fair conditions, it appears to be too small to have sensibly affected the observations of the principal star, which exhibit a rather large correction to the adopted Right Ascension.

The Latitude Results follow, in a separate table, with similar details for the two circles, and with the Circumpolar values included. The values of the Normal Latitude, φ_0, have been derived by the use of *Chandler's* formula for the Latitude Variation. The correction is small during this period, less than 0".1 in the extreme cases, and the mean correction is less than half the largest value.

FUNDAMENTAL STARS, 1900.0, NEWCOMB. OBSERVED CORRECTIONS.

Star.	Mag.	R. A. 1900.0.	Pr. Mo.	Decl. 1900.0.	Pr. Mo.	R. A.	West.	East.	West.
		h m s	s	° ′ ″	″	s	″	″	″
μ Androm.	3.9	0 51 12.035	+0.0131	+37 57 25.13	+0.030	+0.014	−0.09	−0.15	−0.11
μ Cassiop.	5.2	1 1 36.792	+ .3912	54 25 47.83	−1.552	+ .066	− .51	− .72	− .54
ζ Androm.	4.9	1 16 26.999	+ .0031	45 0 16.85	− .008	+ .003	+ .35	+ .48	+ .34
δ Cassiop.	2.8	1 19 16.220	+ .0405	59 42 56.57	− .036	− .052	+ .17	.00	+ .25
ρ Persei	Var.	2 58 45.954	+ .0116	38 27 10.20	− .115	+ .036	− .54	− .26	− .55
ι Persei	4.2	3 1 50.831	+ .1331	49 13 52.07	− .099	+ .025	+ .86	+ .88	+ .95
α Persei	1.9	3 17 10.815	+ .0030	49 30 19.36	− .028	+ .024	+ .12	+ .08	+ .01
2 H. Cam.	4.2	3 20 58.092	+ .0027	59 35 30.95	+ .001	− .112	− .33	− .29	− .29
Mean Mag.	4			Number of observations		30	30	16	16
				Probable error one obs.		s ±0.023	″ ±0.19	″ ±0.24	″ ±0.19

FUNDAMENTAL STARS, 1900.0, NEWCOMB. OBSERVED AND REDUCED LATITUDES.

Star.	W.	No.	φ_o	E.	No.	φ_o	W.	No.	φ_o	E.–W.
	″		″	″		″	″		″	″
μ Androm.	25.83	30	25.87	26.04	16	26.10	25.87	16	25.93	+0.17
μ Cassiop.	26.20	30	26.24	26.53	16	26.59	26.24	16	26.30	+ .29
ζ Androm.	25.45	30	25.49	25.49	16	25.55	25.47	16	25.53	+ .02
δ Cassiop.	25.60	30	25.64	25.90	16	25.96	25.55	16	25.61	+ .35
ρ Persei	26.26	38	26.31	26.13	16	26.19	26.25	16	26.31	– .12
ι Persei	25.01	38	25.06	25.14	16	25.20	24.94	16	25.00	+ .20
α Persei	25.71	38	25.76	25.84	16	25.90	25.76	16	25.82	+ .08
2 H. Cam.	26.06	38	26.11	26.16	16	26.22	26.02	16	26.08	+ .14
Means			25.81			25.96			25.82	
43 H. Ceph. U. C.	25.81	30	25.85	25.96	16	26.02	25.69	16	25.75	+ .27
β Urs. Min. L. C.	25.77	36	25.82	25.43	16	25.49	25.64	16	25.70	– .21
							Mean			+0.12

(4) **The Observed Places.** In the list following the B. D. numbers are from the published Bulletin of the Astrophotographic Conference. When the magnitudes are given in tenths, they are from the same source. The magnitudes printed in fractions are from the estimates made here at the time of observation, for stars which appeared to differ from the original list. The order of the original Bulletin has been changed in some instances, to conform to the order of Right Ascension. Six additional stars, not contained in the original list, are marked with an asterisk (*) in the following.

There are in all 325 stars, each of which has been observed twice in the same position of the instrument, fixed circle West.

The epoch of observation ranges from 1900.71 to 1900.93. No proper motions have been applied in the reduction of the observations. One star, however, 48° 746, $2^h\ 37^m\ 22^s$, is included in Newcomb's Catalogue, and has proper motion of $+0^s.035$ and $-0''.087$. The differences, Observed–Newcomb, would be $+0^s.016$ and $-0''.64$, with proper motion included.

The following errata are to be corrected in Bulletin No. 1, containing the first issue of these results:

Page (2) Table of Fund. Stars. Decl. and pr. mo. ° ′ ″ ‴ in place of h. m. s. s.
Page (4) 45° 416 $1^h\ 35^m\ 22^s$ Decl. 23″.31 in place of 23″.81.
Page (6) 44° 598 2 49 28 Decl. 37 .36 in place of 39 .36.

FIRST LIST OF EROS STARS.

Star.	Mag.	R. A. 1900.0.	Prec.	Decl. 1900.0.	Prec.	Star.	Mag.	R. A. 1900.0.	Prec.	Decl. 1900.0.	Prec.
°		h m s	s	° ′ ″	″	°		h m s	s	° ′ ″	″
49 399	8.6	1 24 0.451	3.6319	49 25 30.71	+18.721	51 360	7.6	1 33 34.414	3.7554	52 8 21.66	+18.404
46 370	6.0	24 6.094	3.5780	46 29 28.68	18.717	41 321	8½	33 41.394	3.5550	42 13 51.14	18.400
51 317	8.9	24 26.114	3.6796	51 34 41.89	18.707	53 363	6.8	33 51.510	3.7885	53 21 39.07	18.394
47 429	8.5	24 33.501	3.5957	47 22 49.76	18.703	51 363	8½	34 2.600	3.7398	51 21 27.56	18.387
49 401	8.5	24 37.768	3.6508	50 9 6.83	18.700	44 346	9.0	34 45.257	3.5963	44 16 28.57	18.363
49 400	9.5	24 38.400	3.6497	50 5 56.00	18.700	51 364	8¼	34 10.363	3.7567	52 1 21.60	18.383
46 373	8½	24 47.964	3.5920	47 3 4.20	18.695	44 347	8.4	34 48.004	3.6010	44 30 48.34	18.361
47 434	9.5	24 51.770	3.6081	47 54 3.93	18.693	45 416	8½	35 22.680	3.6305	45 54 23.31	18.340
49 403	9¼	24 52.258	3.6475	49 54 49.22	18.693	52 406	8.7	35 23.272	3.7865	52 52 14.33	18.340
48 453	7.1	24 54.331	3.6261	48 49 42.20	18.692	44 352	8.0	35 50.846	3.6170	45 4 17.54	18.324
48 454	9.0	25 25.847	3.6235	48 31 27.16	18.688	42 351	9.1	35 58.031	3.5683	42 21 32.10	18.320
48 455	9.1	25 26.405	3.6143	48 16 17.14	18.674	42 352	7.0	36 3.679	3.5825	43 8 3.94	18.316
50 297	9¼	25 41.679	3.6724	50 55 13.79	18.667	42 354	8.6	36 16.002	3.5725	42 30 56.87	18.309
51 323	7½	25 46.470	3.6972	51 57 16.66	18.664	41 329	8¼	36 16.709	3.5538	41 25 25.88	18.308
50 298	9.5	26 12.629	3.6716	50 38 52.04	18.650	45 422	9.0	36 23.972	3.6289	45 32 9.34	18.304
47 442	9.3	26 16.944	3.6167	47 54 12.37	18.648	45 424	8.8	37 4.307	3.6305	45 26 10.57	18.280
50 299	8.8	26 22.648	3.6655	50 18 33.57	18.645	44 354	7.0	37 11.130	3.6192	44 49 5.03	18.276
50 300	9.5	26 48.690	3.6825	50 58 5.09	18.630	52 420	7.0	37 17.168	3.7872	52 22 54.63	18.273
50 301	9.3	26 59.937	3.6708	50 22 0.81	18.625	42 356	8.8	37 17.472	3.5897	43 12 1.39	18.273
48 463	8.7	27 16.218	3.6343	48 30 18.10	18.616	53 375	8.8	37 25.592	3.8163	53 26 42.43	18.267
49 412	9.3	27 49.356	3.6603	49 37 3.32	18.598	54 368	7½	37 47.013	3.8449	54 22 59.89	18.254
51 331	8.6	27 58.678	3.6981	51 19 13.08	18.593	52 424	8	37 58.540	3.7997	52 41 8.03	18.247
45 376	8.9	28 0.309	3.5816	45 27 46.71	18.592	42 360	7.6	38 5.312	3.5853	42 44 13.77	18.244
47 450	8.9	28 5.317	3.6276	47 54 30.16	18.589	42 361	8.2	38 13.536	3.5934	43 8 42.08	18.238
49 414	9.3	28 19.626	3.6719	50 1 1.34	18.582	52 433	8.6	39 43.334	3.8233	53 6 21.99	18.184
48 470	7.6	28 20.300	3.6519	49 3 3.66	18.581	43 364	8.5	40 15.587	3.6224	44 8 45.48	18.163
45 379	9.0	28 33.273	3.5946	46 0 44.98	18.574	42 370	8	40 16.740	3.6047	43 12 16.84	18.163
51 334	8¼	28 33.758	3.7093	51 38 28.49	18.573	40 364	7.8	40 37.114	3.5675	41 3 4.73	18.150
44 326	8.8	28 37.850	3.5783	45 4 57.88	18.571	41 342	8.8	41 11.326	3.5815	41 41 37.87	18.129
45 383	9.0	29 15.883	3.5820	45 19 0.16	18.550	53 386	7¼	41 14.763	3.8453	53 30 17.76	18.127
44 329	8.5	29 20.373	3.5704	44 24 51.71	18.548	42 373	7.9	41 25.400	3.5987	42 34 50.48	18.121
51 338	7.4	29 22.471	3.7150	51 39 7.81	18.547	53 388	8½	41 35.298	3.8444	53 23 25.24	18.114
46 389	8½	29 30.463	3.6067	46 22 50.90	18.542	41 347	8.7	41 45.139	3.5883	41 55 23.66	18.108
46 393	7.4	29 59.288	3.6136	46 36 11.28	18.535	52 441	8.3	41 53.007	3.8287	52 44 58.44	18.103
48 477	8.7	30 3.270	3.6552	48 41 35.77	18.524	42 375	8¼	41 55.686	3.6037	42 42 44.33	18.101
49 416	9¼	30 5.744	3.6874	50 12 24.30	18.523	54 383	8.6	42 39.655	3.8888	54 38 37.82	18.074
46 397	7.0	30 18.738	3.6196	46 48 53.54	18.515	41 352	9.1	42 55.536	3.5992	42 12 34.00	18.063
47 460	6.6	30 20.242	3.6471	48 12 43.29	18.514	53 395	8.6	43 10.976	3.8565	53 25 1.30	18.054
51 339	7.6	30 24.319	3.7125	51 14 16.01	18.512	43 373	8.6	43 11.262	3.6197	43 14 14.89	18.054
47 462	7.3	30 32.838	3.6353	47 33 43.77	18.508	41 353	8.5	43 14.313	3.5875	41 29 28.55	18.052
52 387	8.5	30 39.398	3.7463	52 35 43.03	18.504	54 388	7.9	43 57.617	3.9007	54 43 14.49	18.024
47 463	7.5	30 40.326	3.6409	47 48 15.89	18.503	53 398	8.4	44 0.462	3.8574	53 14 45.19	18.023
50 314	8.7	30 44.592	3.7038	50 44 59.44	18.501	54 392	8.0	44 42.203	3.9121	54 54 37.40	17.996
49 418	9.5	30 56.377	3.6761	49 25 42.96	18.494	54 393	7.3	44 53.563	3.8987	54 25 44.80	17.988
51 344	9	31 9.498	3.7368	52 7 14.95	18.487	42 388	8.0	45 3.088	3.6249	43 1 46.22	17.982
46 404	7.8	31 12.902	3.6175	46 26 18.25	18.485	53 402	8½	45 11.687	3.8694	53 22 19.37	17.976
45 392	7.8	31 13.755	3.6084	45 56 57.27	18.484	42 390	8.5	45 21.862	3.6118	42 16 6.52	17.970
45 394	8.7	31 25.238	3.5999	45 26 52.04	18.478	54 396	6.1	45 25.025	3.9094	54 39 8.72	17.968
49 422	8.8	31 42.110	3.6954	50 5 47.50	18.468	40 384	9.2	45 37.362	3.5887	40 57 31.70	17.960
44 335	8½	32 5.154	3.5830	44 18 30.80	18.455	39 421	8½	46 25.487	3.5760	40 3 10.18	17.929
44 337	8.1	32 20.547	3.5997	45 9 18.18	18.447	41 362	8.2	46 43.169	3.6009	41 20 51.42	17.921
45 398	8¼	32 22.293	3.6142	45 55 6.09	18.445	40 390	8.2	46 49.115	3.5948	40 59 27.87	17.913
44 341	7	32 30.271	3.5957	44 53 26.07	18.441	41 364	9.0	47 10.186	3.6160	42 2 15.69	17.900
52 393	8.6	32 31.643	3.7629	52 43 47.01	18.440	54 408	6.8	47 11.010	3.9367	55 6 17.20	17.899
43 337	8.1	32 39.704	3.5741	43 38 7.99	18.435	40 394	6.2	47 17.359	3.5831	40 14 10.51	17.895
53 355	8.4	33 5.086	3.7899	53 37 37.14	18.421	53 416	8.4	48 7.400	3.8907	53 23 59.01	17.862
43 341	8.8	33 10.250	3.5748	43 31 32.60	18.418	54 413	8¼	48 13.230	3.9169	54 14 10.91	17.858
52 399	8.1	33 13.470	3.7597	52 24 27.01	18.416	53 419	7.4	48 25.738	3.9019	53 41 48.96	17.849
51 357	7.7	33 13.713	3.7439	51 45 32.91	18.416	40 400	8¼	48 27.511	3.5912	40 23 51.89	17.848
43 343	5.5	33 21.026	3.5819	43 52 39.04	18.412	39 431	7.4	48 37.407	3.5831	40 9 50.91	17.842

Star.	Mag.		R. A. 1900.0.	Prec.	Decl. 1900.0.	Prec.
°			h m s	s	° ′ ″	″
40 401	8.9		1 48 38.932	3.6060	41 8 57.57	+17.841
39 434	6.9		48 52.590	3.5897	40 12 43.24	17.831
54 415	8.0		49 8.397	3.9507	55 5 10.78	17.821
55 440	8¼		49 13.838	3.9596	55 20 13.89	17.817
54 417	8.4		49 32.308	3.9562	55 9 55.81	17.805
41 374	7		50 28.440	3.6191	41 24 8.33	17.767
42 402	9.0	*	50 42.219	3.6457	42 42 5.01	17.758
41 377	8.2		51 9.557	3.6198	41 16 37.66	17.739
54 424	9.1		51 12.926	3.9593	54 52 53.32	17.737
40 406	8.9		51 13.925	3.6011	40 16 18.99	17.736
53 428	8.8		51 36.442	3.9375	54 7 12.73	17.721
54 429	7.8		52 10.159	3.9734	55 5 40.24	17.698
40 412	8		52 20.664	3.6088	40 25 34.03	17.691
39 447	8.5		52 22.294	3.6019	40 3 2.93	17.690
55 464	8.2		52 50.816	3.9852	55 17 55.27	17.671
54 431	9½		52 56.325	3.9540	54 20 9.56	17.666
39 448	8.2		53 36.226	3.6077	40 4 42.51	17.639
40 415	7.5		53 39.195	3.6230	40 51 50.94	17.637
37 452	7.4		54 18.521	3.5743	38 6 44.86	17.610
39 450	7.9		54 28.740	3.6002	39 28 55.31	17.602
40 421	7.1		54 41.313	3.6278	40 52 34.35	17.593
38 392	7.8		54 46.780	3.5951	39 8 29.30	17.589
38 391	9.0	*	54 48.531	3.5949	39 7 21.36	17.588
40 423	7.3		55 8.988	3.6270	40 43 38.67	17.574
53 437	8.9		55 22.649	3.9453	53 32 1.17	17.564
53 439	5.4		55 38.274	3.9623	54 0 15.40	17.553
39 454	8.6		55 45.140	3.6190	40 11 2.38	17.548
54 444	8.0		56 26.856	3.9930	54 45 0.36	17.519
37 465	8.1		56 38.224	3.5827	38 3 41.70	17.511
53 440	7.6		56 44.991	3.9770	54 12 43.34	17.506
55 484	8.6		57 4.011	4.0161	55 17 12.88	17.493
37 468	8.7		57 6.206	3.5865	38 9 52.80	17.491
54 448	8¾		57 6.322	3.9939	54 38 21.23	17.491
39 457	9.1		57 45.261	3.6157	39 34 29.20	17.463
54 452	8¼		57 57.887	3.9878	54 16 33.59	17.454
38 401	8.5	*	58 17.660	3.6055	38 55 22.90	17.440
54 453	6.6		58 17.941	4.0200	55 8 35.90	17.440
38 402	8¼		58 43.355	3.6078	38 57 18.20	17.421
54 457	8½		59 8.322	4.0018	54 26 56.41	17.403
39 464	7.8		59 43.272	3.6183	39 16 52.39	17.378
53 451	8		2 0 2.937	3.9873	53 49 48.47	17.363
38 408	8.2		0 22.602	3.6044	38 25 17.53	17.350
39 468	8.5		0 30.320	3.6381	40 7 14.77	17.344
53 453	8.5		1 36.448	4.0082	54 7 37.99	17.295
37 486	5.0		2 27.043	3.5929	37 23 4.48	17.257
55 527	9.1		2 48.153	4.0612	55 22 45.07	17.242
38 416	7.3		2 49.024	3.6229	38 52 24.56	17.241
37 488	8.6		2 54.413	3.6074	38 3 19.72	17.239
54 469	8.8		3 9.180	4.0504	55 0 48.36	17.226
53 459	8		3 20.826	4.0119	53 51 27.48	17.217
53 460	6.2		3 24.972	3.9948	53 22 14.60	17.214
54 470	8.9		3 27.870	4.0456	54 49 6.51	17.212
53 470	8.5		4 59.672	4.0300	54 4 47.16	17.143
54 483	8.7		6 11.467	4.0584	54 38 27.51	17.089
53 474	8.2		6 26.038	4.0282	53 44 57.99	17.077
54 494	7¾		7 42.004	4.0767	54 50 56.66	17.019
53 485	9.0		7 58.293	4.0325	53 34 28.51	17.007
Anon.	9½	*	8 2.580	4.0566	54 14 10.64	17.003
53 486	7.8		8 4.894	4.0506	54 3 51.26	17.001
55 551	8.1		8 6.335	4.0957	55 16 48.19	17.000
54 497	7.1		2 8 17.180	4.0723	54 37 14.30	+16.993
52 549	8.4		8 28.042	4.0196	53 6 39.16	16.983
54 500	7.9		8 34.352	4.0932	55 7 42.08	16.979
53 494	8.6		11 6.896	4.0689	54 0 2.49	16.859
53 497	7.8		11 34.858	4.0653	53 48 59.87	16.837
54 511	8.6		11 35.745	4.1127	55 4 41.25	16.836
52 563	8.5		12 6.090	4.0436	53 6 51.24	16.812
53 501	8.7		12 6.483	4.0621	53 38 0.28	16.812
54 525	6.5		14 3.991	4.1249	54 56 55.18	16.718
53 507	6½		14 20.024	4.0921	54 3 4.02	16.705
53 513	8.8		14 54.513	4.0865	53 47 27.20	16.678
54 530	9.2		15 44.194	4.1237	54 37 21.42	16.637
54 535	6.2		16 54.172	4.1429	54 54 33.94	16.580
53 519	8.4		17 20.156	4.1005	53 44 9.57	16.558
53 521	8.4		17 28.848	4.0858	53 19 11.30	16.552
52 576	8.8		17 35.313	4.0747	52 59 36.73	16.545
54 539	8		18 15.077	4.1478	54 48 3.67	16.513
52 580	9		19 3.134	4.0812	52 55 2.07	16.473
53 525	8.4		19 30.262	4.1123	53 40 26.70	16.451
52 581	8½		20 30.484	4.0952	53 2 58.92	16.401
54 554	8.4		21 46.705	4.1606	54 31 35.08	16.336
52 585	9.2		21 54.803	4.1058	53 5 36.84	16.329
52 587	8.5		22 52.518	4.0941	52 36 52.89	16.280
53 532	8.2		23 5.256	4.1251	53 24 20.85	16.269
54 565	8.5		24 32.707	4.1748	54 27 4.22	16.203
51 587	9½		24 57.600	4.0793	51 51 45.89	16.173
52 592	8.3		25 3.157	4.0991	52 23 27.76	16.168
53 539	8.8		25 29.972	4.1586	53 51 59.64	16.145
53 540	9.3		25 49.261	4.1476	53 32 5.68	16.128
53 541	7.2		25 55.753	4.1708	54 6 8.26	16.122
52 595	8.6		27 16.853	4.1127	52 23 25.22	16.052
52 597	8.8		27 22.965	4.1476	52 57 53.79	16.047
51 594	8.8		27 39.756	4.0833	51 31 56.82	16.032
50 587	9.1		28 23.809	4.0597	50 45 2.18	15.993
53 546	8.8		28 31.880	4.1534	53 14 57.60	15.986
53 547	8.4		28 34.653	4.1788	53 52 42.49	15.984
51 598	8.0		29 15.614	4.1118	52 2 59.19	15.955
51 599	7.1		29 55.805	4.0963	51 31 28.55	15.912
52 602	8½		30 52.468	4.1338	52 22 39.11	15.862
50 589	8.6		31 23.086	4.0653	50 26 0.13	15.834
51 604	9.0		31 37.500	4.1105	51 38 37.06	15.822
50 595	8.5		32 24.993	4.0681	50 21 2.99	15.779
49 733	8.9		32 49.190	4.0610	50 5 13.42	15.757
52 609	7.6		33 23.841	4.1487	52 22 23.04	15.726
50 599	8½	*	33 34.298	4.1051	51 11 38.27	15.716
50 601	8½		33 42.639	4.1058	51 11 33.53	15.708
40 567	8.7		34 12.315	3.7940	40 53 8.21	15.682
49 741	9.3		34 18.375	4.0515	49 34 56.35	15.677
49 743	9½		34 24.970	4.0558	49 41 21.14	15.670
51 616	8.8		35 21.708	4.1460	52 0 20.58	15.618
39 609	9.0		35 37.974	3.7792	40 4 41.70	15.604
40 570	7.5		35 38.434	3.8017	40 57 57.46	15.604
51 618	9.1		35 38.875	4.1274	51 28 30.93	15.603
41 517	8.2		35 47.331	3.8226	41 44 51.67	15.595
52 616	6.2		35 56.600	4.1929	53 5 58.50	15.586
52 617	9		36 19.717	4.1643	52 19 47.20	15.565
42 610	8.4		36 34.768	3.8483	42 35 5.20	15.551
51 620	9½		36 38.180	4.1527	51 59 16.56	15.548
50 613	8.4		36 40.200	4.1194	51 6 28.75	15.547
49 752	8.6		36 45.927	4.0780	49 57 33.85	15.541

Star.	Mag.	R. A. 1900.0.	Prec.	Decl. 1900.0.	Prec.
°		h m s	s	° ′ ″	″
49 753	9	2 36 47.856	4.0858	50 10 19.05	+15.539
42 613	8.6	37 4.819	3.8558	42 46 53.74	15.524
42 614	7	37 6.197	3.8650	43 6 45.62	15.523
42 615	8.8	37 6.621	4.0387	42 11 44.10	15.522
40 577	7.5	37 21.041	3.8112	41 4 21.85	15.509
48 746	4.0	37 22.050	4.0409	48 48 19.51	15.508
50 617	8¼	37 24.189	4.1119	50 47 57.32	15.506
43 566	6.5	37 34.270	3.8883	43 52 18.60	15.497
40 581	9.0	37 52.927	3.7949	40 21 34.36	15.479
46 622	7½	37 53.562	3.9658	46 25 10.36	15.478
40 582	8.6	37 56.152	3.8034	40 40 55.66	15.476
50 620	8.4	38 4.898	4.0975	50 18 13.15	15.468
44 569	8.1	38 12.034	3.9292	45 10 34.37	15.461
50 623	8.8	38 32.878	4.1319	51 9 44.90	15.442
48 750	8	38 56.205	4.0378	48 32 7.67	15.421
47 692	8.3	38 58.536	4.0128	47 43 15.12	15.418
41 530	8.6	39 12.251	3.8460	42 6 17.76	15.406
46 628	9.0	39 22.990	3.9852	46 48 41.66	15.395
40 589	8.0	39 28.889	3.8043	40 29 21.42	15.390
50 627	8¼	39 29.395	4.1011	50 11 44.40	15.390
48 752	9.0	39 35.541	4.0570	48 56 21.52	15.383
39 628	7.9	39 37.834	3.7972	40 11 27.11	15.381
44 573	8.5	39 44.410	3.9317	45 1 44.58	15.376
40 590	8.8	39 47.519	3.8199	41 2 22.80	15.372
51 626	8¼	39 53.268	4.1634	51 47 4.11	15.367
43 574	7.9	40 0.870	3.8838	43 20 39.50	15.360
51 628	8½	40 6.393	4.1624	51 43 41.32	15.355
45 660	8¼	40 33.938	3.9496	45 29 45.88	15.329
41 538	8.0	40 42.579	3.8427	41 45 18.77	15.320
42 628	7.6	40 53.105	3.8772	42 58 56.59	15.311
43 576	7.0	40 58.941	3.9025	43 51 8.74	15.305
44 577	8.8	41 0.693	3.9319	44 50 44.06	15.303
49 773	9.1	41 5.136	4.0901	49 39 33.47	15.300
50 630	7.9	41 5.988	4.1449	51 7 57.34	15.299
47 698	8.4	41 20.281	4.0262	47 46 42.37	15.286
48 760	8.9	41 25.432	4.0615	48 48 5.91	15.281
41 541	8¾	41 26.287	3.8372	41 26 54.92	15.280
50 636	7.6	41 35.761	4.1230	50 28 43.94	15.270
43 579	7.5	41 43.490	3.8869	43 12 14.77	15.264
47 700	8.3	41 43.792	4.0368	48 2 9.47	15.263
46 638	8.7	41 50.608	3.9883	46 32 46.10	15.256
48 762	7¾	42 1.297	4.0633	48 45 58.72	15.247
40 602	8.8	42 4.306	3.8161	40 33 40.00	15.244
41 543	8.8	2 42 12.590	3.8552	41 59 48.72	+15.235
42 633	8½	42 12.789	3.8640	42 18 55.96	15.235
47 702	7¾	42 19.234	4.0121	47 12 29.86	15.230
48 763	8.4	42 27.574	4.0698	48 53 4.08	15.221
51 633	8.6	42 28.136	4.1561	51 13 36.50	15.221
46 641	7¼	42 28.264	3.9995	46 48 3.47	15.221
43 580	9.0	42 34.687	3.9106	43 53 51.38	15.214
48 764	8.6	42 43.227	4.0563	48 27 48.80	15.207
45 662	8	42 54.931	3.9755	45 59 9.93	15.196
49 782	9.0	42 58.877	4.0979	49 35 53.84	15.192
44 582	8.6	43 4.800	9.9456	44 59 17.35	15.182
47 709	7.7	43 21.263	4.0341	47 43 50.56	15.171
43 583	8¾	43 26.374	3.8996	43 23 52.16	15.166
42 637	9.1	43 27.593	3.8710	42 23 3.22	15.164
46 644	9.2	43 34.622	4.0111	46 59 52.55	15.157
40 610	8.5	43 51.600	3.8187	40 24 15.52	15.141
47 711	7.9	43 53.271	4.0419	47 52 32.98	15.140
45 665	8.8	44 0.470	3.9628	45 25 20.88	15.133
40 612	9.3	44 5.746	3.8323	40 52 57.44	15.128
42 638	7.6	44 6.287	3.8881	42 54 0.59	15.128
43 586	8.7	44 6.767	3.9185	43 56 39.29	15.127
41 550	8.7	44 7.310	3.8499	41 31 48.07	15.127
45 667	8.2	44 9.574	3.9709	45 39 30.02	15.124
48 770	8.7	44 19.642	4.0810	48 56 9.49	15.114
47 714	8.3	44 39.919	4.0532	48 5 31.71	15.095
45 669	8.4	44 55.637	3.9717	45 34 25.70	15.080
46 648	6.4	44 59.846	3.9992	46 25 45.36	15.076
44 591	7.8	45 6.744	3.9438	44 38 47.62	15.069
44 593	7.0	45 16.862	3.9395	44 28 54.06	15.060
48 777	8½	45 20.190	4.0696	48 28 14.06	15.057
47 720	9.1	45 37.379	4.0376	47 30 3.15	15.040
48 782	8½	45 38.708	4.0931	49 5 23.89	15.038
47 721	8¼	45 50.914	4.0560	48 0 30.59	15.028
43 593	8.8	45 52.848	3.9087	43 21 42.71	15.025
41 556	7.2	45 54.749	3.8591	41 36 33.01	15.023
42 643	9.1	46 6.252	3.8807	42 21 28.01	15.012
46 652	7	47 16.643	4.0135	46 45 6.20	15.002
Anon.	9½	* 48 14.203	3.9017	42 47 29.27	14.888
42 650	8.9	48 26.770	3.9030	42 48 20.80	14.886
46 656	7.3	48 48.480	4.0322	46 53 51.10	14.855
45 679	8.7	49 15.021	3.9863	45 26 0.88	14.828
44 598	8¼	49 28.890	3.9604	44 34 37.36	14.813

(5) **The Separate Observations.** The following pages contain the separate results, with the dates and corresponding epoch. The estimates of magnitude are added, when these differed from the magnitude of the original list. An occasional third observation has been made, usually because one of the first two had been defective or unsatisfactory in some respect.

OBSERVATIONS OF EROS STARS.

49° 399.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Sep. 17		1 24 0.434	49 25 30.46
18		0.469	30.97
1900.71		0.451	30.71

46° 370.

Sep. 19		1 24 6.112	46 29 28.76
20		6.077	28.59
1900.72		6.094	28.68

51° 317.

Sep. 21		1 24 26.104	51 34 42.34
24		26.124	41.43
1900.73		26.114	41.89

49° 400.

Sep. 25	9½	1 24 38.439	50 5 56.03
26		38.362	55.97
1900.74	S. p.	38.400	56.00

47° 429.

Sep. 27		1 24 33.487	47 22 49.71
28		33.516	49.81
1900.74		33.501	49.76

49° 401.

Oct. 1		1 24 37.802	50 9 6.97
15		37.733	6.69
1900.77	N. f.	37.768	6.83

46° 373.

Oct. 16		1 24 48.022	47 3 4.08
20	8½	47.907	4.32
1900.80	N. p.	47.964	4.20

49° 403.

Oct. 22	9¼	1 24 52.233	49 54 49.31
23	9¼	52.282	49.14
1900.81		52.258	49.22

47° 434.

Oct. 24	9½	1 24 51.797	47 54 3.96
25	9½	51.744	3.91
1900.82	S. p.	51.770	3.93

48° 453.

Nov. 1		1 24 54.290	48 49 42.02
2		54.373	42.38
1900.84		54.331	42.20

48° 454.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Oct. 26		1 25 25.821	48 31 27.16
29		25.872	27.16
1900.82		25.847	27.16

48° 455.

Nov. 5		1 25 26.413	48 16 17.23
8		26.397	17.06
1900.85		26.405	17.14

50° 297.

Nov. 12	9¼	1 25 41.670	50 55 13.80
13		41.688	13.77
1900.87		41.679	13.79

51° 323.

Oct. 8	7½	1 25 46.487	51 57 16.66
9		46.454	16.65
1900.77		46.470	16.66

50° 298.

Sep. 17	9½	1 26 12.627	50 38 51.83
18		12.631	52.26
1900.71		12.629	52.04

47° 442.

Sep. 19		1 26 16.883	47 54 12.47
20		17.006	12.27
1900.72		16.944	12.37

50° 299.

Sep. 21		1 26 22.681	50 18 33.49
24		22.615	33.64
1900.73		22.648	33.57

50° 300.

Sep. 25	9½	1 26 48.727	50 58 5.56
26		48.654	4.61
1900.74		48.690	5.09

50° 301.

Sep. 27		1 26 59.920	50 22 0.64
28		59.953	0.98
1900.74		59.937	0.81

48° 463.

Oct. 1		1 27 16.211	48 30 18.07
15		16.224	18.14
1900.77		16.218	18.10

49° 412.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Oct. 16		1 27 49.355	49 37 3.20
20		49.356	3.44
1900.80		49.356	3.32

51° 331.

Oct. 22		1 27 58.698	51 19 12.78
23		58.658	13.37
1900.81		58.678	13.08

45° 376.

Oct. 24	S.f.	1 28 0.333	45 27 46.38
25		0.285	47.05
1900.82		0.309	46.71

47° 450.

Nov. 1		1 28 5.292	47 54 30.06
2		5.341	30.25
1900.84		5.317	30.16

49° 414.

Sep. 17		1 28 19.643	50 1 1.24
18		19.609	1.44
1900.71		19.626	1.34

48° 470.

Sep. 19		1 28 20.340	49 3 3.76
20		20.261	3.55
1900.72		20.300	3.66

51° 334.

Sep. 21		1 28 33.803	51 38 28.23
24	8¾	33.713	28.75
1900.73		33.758	28.49

45° 379.

Oct. 26	N.f.	1 28 33.221	46 0 45.16
29		33.265	44.19
Nov. 9		33.333	45.60
1900.84		33.273	44.98

44° 326.

Nov. 5		1 28 37.847	45 4 57.60
8		37.852	58.15
1900.85		37.850	57.88

45° 383.

Sep. 25		1 29 15.822	45 19 0.60
26		15.944	18 59.72
1900.74		15.883	19 0.16

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
51° 338.			
Sep. 28		1 29 22.455	51 39 8.01
Oct. 8		22.488	7.61
1900.76		22.471	7.81
44° 329.			
Oct. 1	S.f.	1 29 20.433	44 24 52.00
9		20.337	51.38
15		20.349	51.75
1900.77		20.373	51.71
46° 389.			
Nov. 12	8½	1 29 30.459	46 22 50.90
13		30.468	50.91
1900.87		30.463	50.90
46° 393.			
Oct. 16		1 29 59.271	46 36 11.23
20		59.304	11.32
1900.80		59.288	11.28
49° 416.			
Oct. 22		1 30 5.747	50 12 24.00
23	9¼	5.741	24.61
1900.81		5.744	24.30
48° 477.			
Nov. 26		1 30 3.247	48 41 35.85
27		3.292	35.69
1900.91		3.270	35.77
46° 397.			
Nov. 1		1 30 18.755	46 48 53.57
2		18.720	53.52
1900.84		18.738	53.54
47° 460.			
Sep. 17		1 30 20.261	48 12 42.84
18		20.224	43.74
1900.71		20.242	43.29
51° 339.			
Sep. 19		1 30 24.295	51 14 15.81
20		24.344	16.21
1900.72		24.319	16.01
47° 462.			
Sep. 21		1 30 32.829	47 33 43.91
24		32.846	43.62
1900.73		32.838	43.77
52° 387.			
Oct. 26		1 30 39.410	52 35 42.87
29		39.385	43.19
1900.82		39.398	43.03
47° 463.			
Nov. 5		1 30 40.334	47 48 15.83
8		40.317	15.94
1900.85		40.326	15.89
50° 314.			
Oct. 24		1 30 44.593	50 44 59.42
25		44.591	59.46
1900.82		44.592	59.44
49° 418.			
Nov. 12		1 30 56.383	49 25 42.83
13		56.370	43.08
1900.87		56.377	42.96
51° 344.			
Sep. 25	9	1 31 9.443	52 7 15.09
26	9	9.552	14.81
1900.74		9.498	14.95
46° 404.			
Sep. 27		1 31 12.866	46 26 18.30
28		12.938	18.20
1900.74		12.902	18.25
45° 392.			
Oct. 1		1 31 13.728	45 46 56.90
15		13.753	57.63
Nov. 9		13.783	57.28
1900.80		13.755	57.27
45° 394.			
Nov. 26		1 31 25.210	45 26 51.76
27		25.266	52.33
1900.91		25.238	52.04
49° 422.			
Oct. 16		1 31 42.110	50 5 47.66
20		42.110	47.35
1900.80		42.110	47.50
44° 335.			
Oct. 22	8½	1 32 5.143	44 18 30.60
23	8½	5.166	31.00
1900.81		5.154	30.80
44° 337.			
Nov. 1		1 32 20.520	45 9 18.04
2		20.574	18.32
1900.84		20.547	18.18
45° 398.			
Sep. 17		1 32 22.268	45 55 6.28
18	8¾	22.318	5.89
1900.71		22.293	6.09
44° 341.			
Sep. 19		1 32 30.265	44 53 25.95
20		30.277	26.19
1900.72		30.271	26.07
52° 393.			
Sep. 21	S.f.	1 32 31.681	52 43 46.90
24		31.606	47.13
1900.73		31.643	47.01
43° 337.			
Oct. 26		1 32 39.704	43 38 7.96
29		39.705	8.01
1900.82		39.704	7.99
53° 355.			
Oct. 24		1 33 5.108	53 37 37.01
25		5.064	37.27
1900.82		5.086	37.14
43° 341.			
Nov. 5		1 33 10.231	43 31 32.71
8		10.268	32.48
1900.85		10.250	32.60
52° 399.			
Sep. 25	N.p.	1 33 13.468	52 24 27.11
26		. . .	27.07
Oct. 8		13.471	26.86
1900.75		13.470	27.01
51° 357.			
Nov. 12		1 33 13.706	51 45 33.12
13		13.721	32.70
1900.87		13.713	32.91
43° 343.			
Sep. 27		1 33 21.026	43 52 38.71
28		21.025	39.37
1900.74		21.026	39.04

51° 360.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Oct. 1		1 33 . . .	52 8 21.86
9		34.391	21.50
26		34.438	21.61
1900.77		34.414	21.66

41° 321.

Oct. 16		1 33 41.406	42 13 51.13
20	8½	41.383	51.15
1900.80		41.394	51.14

53° 363.

Nov. 26		1 33 51.526	53 21 38.92
27		51.495	39.21
1900.91		51.510	39.07

51° 363.

Oct. 22	8½	1 34 2.613	51 21 27.50
23	8½	2.586	27.62
1900.81		2.600	27.56

51° 364.

Nov. 1	8¼	1 34 10.339	52 1 21.64
2		10.388	21.57
1900.84		10.363	21.60

44° 346.

Sep. 17		1 34 45.272	44 16 28.64
18		45.241	28.49
1900.71		45.257	28.57

44° 347.

Sep. 19		1 34 47.995	44 30 48.38
20		48.014	48.31
1900.72		48.004	48.34

45° 416.

Sep. 21	8½	1 35 22.706	45 54 22.83
24		22.655	23.80
1900.73		22.680	23.31

52° 406.

Sep. 25		1 35 23.226	52 52 14.50
26		. . .	14.41
Oct. 26		23.319	14.07
1900.77		23.272	14.33

44° 352.

Sep. 27		1 35 50.900	45 4 17.40
28		50.791	17.68
1900.74		50.846	17.54

42° 351.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Oct. 1		1 35 58.003	42 21 32.08
15		58.059	32.11
1900.77		58.031	32.10

42° 352.

Oct. 16		1 36 3.652	43 8 3.98
20		3.706	3.90
1900.80		3.679	3.94

42° 354.

Oct. 22		1 36 16.013	42 30 56.75
23		15.991	56.99
1900.81		16.002	56.87

41° 329.

Oct. 24	8¾	1 36 16.710	41 25 25.98
25	8¾	16.707	25.78
1900.82		16.709	25.88

45° 422.

Nov. 1		1 36 23.969	45 32 9.25
2		23.975	9.43
1900.84		23.972	9.34

45° 424.

Sep. 17		1 37 4.285	45 26 10.45
18		4.328	10.68
1900.71		4.307	10.57

44° 354.

Sep. 19		1 37 11.137	44 49 4.98
20		11.122	5.08
1900.72		11.130	5.03

42° 356.

Nov. 5		1 37 17.433	43 12 1.38
8		17.512	1.39
1900.85		17.472	1.39

52° 420.

Oct. 26		1 37 17.150	52 22 54.68
29		17.185	54.58
1900.82		17.168	54.63

53° 375.

Sep. 21		1 37 25.599	53 26 42.69
24		25.585	42.17
1900.73		25.592	42.43

54° 368.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Sep. 25	7½	1 37 46.993	54 23 0.20
26		. . .	22 59.79
Oct. 8		47.033	22 59.69
1900.75		47.013	22 59.89

52° 424.

Sep. 27	8	1 37 58.596	52 41 8.06
28		58.483	8.01
1900.74		58.540	8.03

42° 360.

Oct. 1		1 38 5.299	42 44 13.74
15		5.326	13.79
1900.77		5.312	13.77

42° 361.

Oct. 16		1 38 13.520	43 8 41.99
20		13.552	42.17
1900.80		13.536	42.08

52° 433.

Sep. 17		1 39 43.308	53 6 21.87
18		43.361	22.11
1900.71		43.334	21.99

43° 364.

Sep. 19		1 40 15.601	44 8 45.44
20		15.573	45.51
1900.72		15.587	45.48

42° 370.

Sep. 21	8	1 40 16.769	43 12 16.86
24	8	16.710	16.82
1900.73		16.740	16.84

40° 364.

Sep. 25		1 40 37.099	41 3 4.78
26		. . .	4.84
Oct. 8		37.129	4.56
1900.75		37.114	4.73

41° 342.

Sep. 27		1 41 11.348	41 41 37.71
28		11.304	38.03
1900.74		11.326	37.87

53° 386.

Oct. 1		1 41 14.743	53 30 17.59
15	7½	14.783	17.93
1900.77		14.763	17.76

42° 373.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Oct. 16		1 41 25.393	42 34 50.56
20		25.408	50.39
1900.80		25.400	50.48

53° 388.

Oct. 22	8½	1 41 35.325	53 23 25.31
23		35.270	25.17
1900.81		35.298	25.24

41° 347.

Oct. 24	1 41 45.161	41 55 23.72
25	45.110	23.63
26	45.147	23.62
1900.82	45.139	23.66

52° 441.

Sep. 17	1 41 53.016	52 44 58.32
18	52.998	58.56
1900.71	53.007	58.44

42° 375.

Nov. 1		1 41 55 677	42 42 44.11
2	8¾	55.695	44.55
1900.84		55.686	44.33

54° 383.

Sep. 19	1 42 39.627	54 38 37.82
20	39.683	37.82
1900.72	39.655	37.82

41° 352.

Sep. 21	1 42 55.589	42 12 33.95
24	55.483	34.06
1900.73	55.536	34.00

43° 373.

Sep. 25	1 43 11.227	43 14 15.07
26	11.298	14.71
1900.74	11.262	14.89

53° 395.

Sep. 27	N.f.	1 43 10.992	53 25 1.54
28		10.961	1.06
1900.74		10.976	1.30

41° 353.

Oct. 1	1 43 14.293	41 29 28.32
15	14.334	28.78
1900.77	14.313	28.55

54° 388.

Oct. 16		1 43 57.620	54 43 14.43
20		57.614	14.55
1900.80		57.617	14.49

53° 398.

Sep. 17	1 44 0.462	53 14 44.93
18	0.463	45.45
1900.71	0.462	45.19

54° 392.

Sep. 19	1 44 42.186	54 54 37.17
20	42.220	37.64
1900.72	42.203	37.40

54° 393.

Sep. 21	S.p.	1 44 53.608	54 25 44.78
24		53.519	44.81
1900.73		53.563	44.80

42° 388.

Oct. 24	1 45 3.045	43 1 45.75
25	3.105	46.67
26	3.115	46.23
1900.82	3.088	46.22

53° 402.

Sep. 27	8½	1 45 11.698	53 22 19.43
28	8¼	11.675	19.30
1900.74		11.687	19.37

42° 390.

Oct. 1	1 45 21.834	42 16 6.82
15	21.891	6.22
1900.77	21.862	6.52

54° 396.

Oct. 22	1 45 25.012	54 39 8.48
23	25.038	8.96
1900.81	25.025	8.72

40° 384.

Sep. 25	1 45 37.340	40 57 31.75
26	37.385	31.66
1900.74	37.362	31.70

39° 421.

Sep. 17		1 46 25.500	40 3 10.23
18	8½	25.474	10.12
1900.71		25.487	10.18

41° 362.

Sep. 19	1 46 43.178	41 20 51.33
20	43.159	51.52
1900.72	43.169	51.42

40° 390.

Oct. 16	1 46 49.101	40 59 27.54
20	49.129	28.19
1900.80	49.115	27.87

41° 364.

Sep. 21	1 47 10.264	42 2 15.75
24	10.107	15.63
1900.73	10.186	15.69

54° 408.

Sep. 27	1 47 11.021	55 6 17.11
28	10.998	17.30
1900.74	11.010	17.20

40° 394.

Oct. 24	1 47 17.349	40 14 10.79
25	17.369	10.24
1900.82	17.359	10.51

53° 416.

Sep. 25	1 48 7.400	53 23 59.17
26	7.378	58.83
Oct. 8	7.422	59.02
1900.75	7.400	59.01

54° 413.

Oct. 1		1 48 13.190	54 14 10.77
15	8¾	13.271	11.06
1900.77		13.230	10.91

53° 419.

Sep. 17	1 48 25.750	53 41 49.07
18	25.726	48.84
1900.71	25.738	48.96

40° 400.

Oct. 22		1 48 27.513	40 23 52.03
23	8¼	27.509	51.75
1900.81		27.511	51.89

39° 431.

Nov. 1	S.p.	1 48 37.364	40 9 50.92
2		37.450	50.91
1900.84		37.407	50.91

40° 401.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Oct. 16		1 48 38.900	41 8 57.67
20		38.964	57.47
1900.80		38.932	57.57

39° 434.

Sep. 21		1 48 . . .	40 12 43.15
24		52.572	43.40
Oct. 9		52.609	43.18
1900.74		52.590	43.24

54° 415.

Sep. 19		1 49 8.418	55 5 10.64
20		8.376	10.91
1900.72		8.397	10.78

55° 440.

Sep. 27	8½	1 49 13.832	55 20 13.84
28	8½	13.844	13.93
1900.74		13.838	13.89

54° 417.

Oct. 24		1 49 32.335	55 9 56.04
25		32.346	55.71
26		32.243	55.69
1900.82		32.308	55.81

41° 374.

Oct. 1		1 50 28.448	41 24 8.51
15	7	28.431	8.15
1900.77		28.440	8.33

42° 402.

Sep. 17	8¼	1 50 42.208	42 42 5.08
Oct. 9		42.230	4.94
1900.74		42.219	5.01

41° 377.

Sep. 19		1 51 9.527	41 16 37.88
20		9.587	37.44
1900.72		9.557	37.66

54° 424.

Sep. 21		1 51 12.890	54 52 53.10
24		12.962	53.54
1900.73		12.926	53.32

40° 406.

Sep. 25		1 51 13.957	40 16 18.94
26		. . .	18.97
Oct. 8		13.893	19.07
1900.75		13.925	18.99

53° 428.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Sep. 27		1 51 36.492	54 7 12.60
28		36.392	12.86
1900.74		36.442	12.73

54° 429.

Oct. 1		1 52 10.107	55 5 39.81
15		10.210	40.68
1900.77		10.159	40.24

40° 412.

Oct. 16	S.f.	1 52 20.694	40 25 34.31
20	8	20.635	33.76
1900.80		20.664	34.03

39° 447.

Oct. 22		1 52 22.326	40 3 2.99
23		22.263	2.88
1900.81		22.294	2.93

55° 464.

Sep. 17		1 52 50.802	55 17 55.17
18		50.829	55.37
1900.71		50.816	55.27

54° 431.

Oct. 24	9½	1 52 56.265	54 20 9.72
25	9½	56.278	9.61
26		56.431	9.34
1900.82		56.325	9.56

39° 448.

Sep. 19		1 53 36.242	40 4 42.46
20		36.210	42.56
1900.72		36.226	42.51

40° 415.

Sep. 21		1 53 39.183	40 51 50.89
24		39.207	50.99
1900.73		39.195	50.94

37° 452.

Sep. 25		1 54 18.522	38 6 45.05
26		. . .	44.67
Oct. 8		18.520	44.85
1900.75		18.521	44.86

39° 450.

Sep. 27		1 54 28.748	39 28 55.18
28		28.731	55.44
1900.74		28.740	55.31

40° 421.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Oct. 1		1 54 41.315	40 52 33.88
15		41.312	34.82
1900.77		41.313	34.35

38° 392.

Oct. 16	N.p.	1 54 46.772	39 8 29.25
20		46.788	29.34
1900.80		46.780	29.30

38° 391.

Oct. 26		1 54 48.498	39 7 21.89
29		48.565	20.83
1900.82		48.531	21.36

40° 423.

Sep. 17		1 55 8.998	40 43 38.52
18		8.978	38.82
1900.71		8.988	38.67

53° 437.

Oct. 22	N.f.	1 55 22.686	53 32 1.28
23		22.611	1.06
1900.81		22.649	1.17

53° 439.

Sep. 19		1 55 38.261	54 0 15.54
20		38.287	15.26
1900.72		38.274	15.40

39° 454.

Sep. 21		1 55 45.207	40 11 2.10
24		45.074	2.65
1900.73		45.140	2.38

54° 444.

Sep. 25		1 56 26.864	54 45 0.54
Oct. 9		26.848	0.17
1900.75		26.856	0.36

37° 465.

Sep. 27		1 56 38.236	38 3 41.48
28		38.212	41.91
1900.74		38.224	41.70

53° 440.

Oct. 1		1 56 44.932	54 12 43.03
15		45.051	43.66
1900.77		44.991	43.34

55° 484.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Oct. 16		1 57 3.983	55 17 12.90
20		4.040	12.85
1900.80		4.011	12.88

37° 468.

Oct. 24		1 57 6.164	38 9 53.06
25		6.248	52.54
1900.82		6.206	52.80

54° 448.

Oct. 22	N.f.	1 57 6.349	54 38 21.15
23	8¾	6.295	21.31
1900.81		6.322	21.23

39° 457.

Sep. 17		1 57 45.293	39 34 29.19
18		45.230	29.21
1900.71		45.261	29.20

54° 452.

Sep. 19		1 57 57.899	54 16 33.33
20	8¼	57.875	33.84
1900.72		57.887	33.59

38° 401.

Sep. 26		1 58 17.647	38 55 22.74
26		17.672	23.06
1900.78		17.660	22.90

54° 453.

Sep. 21		1 58 17.965	55 8 35.91
24		17.917	35.90
1900.73		17.941	35.90

38° 402.

Sep. 25	N.f.	1 58 43.349	38 57 17.95
Oct. 8	8¼	43.361	18.45
1900.75		43.355	18.20

54° 457.

Sep. 27	N.p.	1 59 8.347	54 26 56.37
28	8½	8.297	56.45
1900.74		8.322	56.41

39° 464.

Oct. 1		1 59 43.207	39 16 52.31
15		43.337	52.47
1900.77		43.272	52.39

53° 451.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Sep. 17	8	2 0 2.951	53 49 48.39
18	8	2.922	48.54
1900.71		2.937	48.47

38° 408.

Sep. 19		2 0 22.616	38 25 17.69
20		22.588	17.37
1900.72		22.602	17.53

39° 468.

Sep. 21		2 0 30.329	40 7 14.50
24		30.310	15.03
1900.73		30.320	14.77

53° 453.

Sep. 25		2 1 36.486	54 7 38.08
26		36.410	37.90
1900.74		36.448	37.99

37° 486.

Sep. 17		2 2 27.033	37 23 4.50
18		27.054	4.45
1900.71		27.043	4.48

55° 527.

Sep. 19		2 2 48.109	55 22 45.16
20		48.198	44.98
1900.72		48.153	45.07

38° 416.

Sep. 21		2 2 49.032	38 52 24.40
24		49.016	24.72
1900.73		49.024	24.56

37° 488.

Oct. 1		2 2 54.420	38 3 19.67
15		54.407	19.77
1900.77		54.413	19.72

54° 469.

Sep. 27		2 3 9.209	55 0 48.16
28		9.152	48.56
1900.74		9.180	48.36

53° 459.

Oct. 16	8	2 3 20.840	53 51 27.64
20		20.811	27.31
1900.80		20.826	27.48

53° 460.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Oct. 22		2 3 25.048	53 22 14.75
23		24.882	14.78
Nov. 28		24.985	14.27
1900.84		24.972	14.60

54° 470.

Sep. 25		2 3 27.842	54 49 6.62
26		27.899	6.40
1900.74		27.870	6.51

53δ 470.

Oct. 1		2 4 59.646	54 4 47.01
15		59.698	47.31
1900.77		59.672	47.16

54° 483.

Sep. 27	S.p.	2 6 11.471	54 38 27.54
28		11.463	27.49
1900.74		11.467	27.51

53° 474.

Oct. 16		2 6 26.043	53 44 57.91
20		26.033	58.07
1900.80		26.038	57.99

54° 494.

Sep. 17	7¾	2 7 42.074	54 50 56.59
18		41.934	56.72
1900.71		42.004	56.66

53° 485.

Sep. 19		2 7 58.290	53 34 28.40
20		58.296	28.62
1900.72		58.293	28.51

Anon.

Nov. 5	9½	2 8 2.628	54 14 11.25
Dec. 7		2.533	10.04
1900.89		2.580	10.64

53° 486.

Sep. 21		2 8 4.871	54 3 50.86
24		4.917	51.66
1900.73		4.894	51.26

55° 551.

Sep. 25	S.p.	2 8 6.333	55 16 48.14
26		6.337	48.23
1900.74		6.335	48.19

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
54° 449.			
Sep. 27		2 8 17.233	54 37 14.32
28		17.126	14.27
1900.74		17.180	14.30
52° 549.			
Oct. 1		2 8 28.028	53 6 38.91
15		28.056	39.41
1900.77		28.042	39.16
54° 500.			
Oct. 16		2 8 34.360	55 7 42.40
20		34.344	41.75
1900.80		34.352	42.08
53° 494.			
Sep. 17		2 11 6.884	54 0 2.16
18		6.907	2.82
1900.71		6.896	2.49
54° 511.			
Sep. 19		2 11 35.707	55 4 41.15
20		35.783	41.35
1900.72		35.745	41.25
53° 497.			
Sep. 21		2 11 34.856	53 48 59.86
24		34.860	59.87
1900.73		34.858	59.87
53° 501.			
Sep. 25		2 12 6.468	53 38 0.52
26		6.499	0.03
1900.74		6.483	0.28
52° 563.			
Sep. 27		2 12 6.115	53 6 50.95
28		6.064	51.53
1900.74		6.090	51.24
54° 525.			
Sep. 17		2 14 4.035	54 56 54.84
18		3.948	55.52
1900.71		3.991	55.18
53° 507.			
Sep. 19	6½	2 14 20.074	54 3 4.11
20	6½	19.975	3.94
1900.72		20.024	4.02

Date	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
53° 513.			
Sep. 21		2 14 54.527	53 47 26.96
24		54.500	27.45
1900.73		54.513	27.20
54° 530.			
Sep. 25		2 15 44.227	54 37 21.43
26		44.161	21.41
1900.74		44.194	21.42
54° 535.			
Sep. 19		2 16 54.178	54 54 34.10
20		54.167	33.79
1900.72		54.172	33.94
53° 519.			
Sep. 17		2 17 20.195	53 44 9.38
18		20.116	9.76
1900.71		20.156	9.57
53° 521.			
Sep. 21		2 17 28.887	53 19 11.17
24		28.808	11.44
1900.73		28.848	11.30
52° 576.			
Sep. 27		2 17 35.349	52 59 36.63
28		35.277	36.83
1900.74		35.313	36.73
54° 539.			
Sep. 25	8	2 18 15.060	54 48 3.77
26	8	15.094	3.57
1900.74		15.077	3.67
52° 580.			
Sep. 19		2 19 3.131	52 55 1.99
20	9	3.138	2.14
1900.72		3.134	2.07
53° 525.			
Sep. 17		2 19 30.272	53 40 26.66
18		30.252	26.74
1900.71		30.262	26.70
52° 581.			
Sep. 21	8½	2 20 30.453	53 2 58.90
24		30.515	58.95
1900.73		30.484	58.92

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
54° 554.			
Sep. 17		2 21 46.727	54 31 34.93
18		46.683	35.22
1900.71		46.705	35.08
52° 585.			
Sep. 19		2 21 54.846	53 5 36.89
20		54.761	36.80
1900.72		54.803	36.84
52° 587.			
Sep. 21		2 22 52.495	52 36 53.05
24		52.540	52.72
1900.73		52.518	52.89
53° 532.			
Sep. 25		2 23 5.223	53 24 20.79
26		5.288	20.91
1900.74		5.256	20.85
54° 565.			
Sep. 17	S.f.	2 24 32.708	54 27 3.94
18		32.706	4.50
1900.71		32.707	4.22
51° 587.			
Sep. 19	9½	2 24 57.613	51 51 45.74
20		57.586	46.03
1900.72		57.600	45.89
52° 592.			
Sep. 21		2 25 3.140	52 23 27.73
24		3.174	27.79
1900.73		3.157	27.76
53° 539.			
Sep. 25		2 25 30.028	53 51 59.75
26		29.917	59.53
1900.74		29.972	59.64
53° 540.			
Sep. 27	9	2 25 49.287	53 32 5.38
28		49.236	5.97
1900.74		49.261	5.68
53° 541.			
Oct. 1		2 25 55.776	54 6 7.72
15		55.730	8.79
1900.77		55.753	8.26

52° 595.

Date.	Mag.	R. A. 1900.0.	Decl. 1900.0.
		h m s	° ′ ″
Sep. 17		2 27 16.882	52 23 25.09
18		16.824	25.36
1900.71		16.853	25.22

52° 597.

Sep. 19		2 27 22.972	52 57 53.96
20		22.958	53.62
1900.72		22.965	53.79

51° 594.

Sep. 21		2 27 39.771	51 31 56.98
24		39.741	56.67
1900.73		39.756	56.82

50° 587.

Sep. 25		2 28 23.814	50 45 2.04
26		23.804	2.31
1900.74		23.809	2.18

53° 546.

Sep. 27		2 28 31.901	53 14 57.31
28		31.858	57.89
1900.74		31.880	57.60

53° 547.

Oct. 1		2 28 34.659	53 52 42.61
15		34.647	42.37
1900.77		34.653	42.49

51° 598.

Sep. 17		2 29 15.607	52 2 59.14
18		15.621	59.24
1900.71		15.614	59.19

51° 599.

Sep. 25		2 29 55.807	51 31 28.65
26		55.803	28.45
1900.74		55.805	28.55

52° 602.

Sep. 19	8½	2 30 52.470	52 22 39 05
20	8½	52.465	39.17
1900.72		52.468	39.11

50° 589.

Sep. 17		2 31 23.111	50 25 59.76
18		23.061	26 0.51
1900.71		23.086	26 0.13

51° 604.

Date.	Mag	R. A. 1900.0.	Decl. 1900.0.
		h m s	° ′ ″
Sep. 21		2 31 37.548	51 38 36.72
24		37.453	37.39
1900.73		37.500	37.06

50° 595.

Sep. 25		2 32 24.999	50 21 2.86
26		24.988	3.12
1900.74		24.993	2.99

49° 733.

Oct. 1		2 32 49.168	50 5 13.37
15		49.211	13.47
1900.77		49.190	13.42

52° 609.

Sep. 17		2 33 23.843	52 22 23.30
18		23.840	22.79
1900.71		23.841	23.04

50° 599.

Sep. 27	N.p.	2 33 34.298	51 11 37.97
Oct. 20	8½	34.297	38.56
1900.77		34.298	38.27

50° 601.

Sep. 28	S.f.	2 33 42.669	51 11 33.53
Oct. 16	8½	42.609	33.54
1900.77		42.639	33.53

40° 567.

Sep. 25		2 34 12.338	40 53 8.14
26		12.292	8.28
1900.74		12.315	8.21

49° 741.

Sep. 19		2 34 18.381	49 34 56.28
20		18.369	56.42
1900.72		18.375	56.35

49° 743.

Sep. 21	9½	2 34 24.974	49 41 21.17
24	9½	24.967	21.12
1900.73		24.970	21.14

51° 616.

Oct. 1		2 35 21.747	52 0 20.69
15		21.668	20.47
1900.77		21.708	20.58

39° 609.

Date.	Mag.	R. A. 1900.0.	Decl. 1900.0.
		h m s	° ′ ″
Oct. 22		2 35 38.019	40 4 41.45
23		37.929	41.94
1900.81		37.974	41.70

40° 570.

Oct. 24		2 35 38.425	40 57 57.29
25		38.443	57.62
1900.82		38.434	57.46

51° 618.

Sep. 17		2 35 38.858	51 28 30.94
18		38.892	30.93
1900.71		38.875	30.93

41° 517.

Oct. 26		2 35 47.342	41 44 51.44
29		47.321	51.90
1900.82		47.331	51.67

52° 616.

Oct. 8		2 35 56.629	53 5 58.70
9		56.571	58.29
1900.77		56.600	58.50

52° 617.

Sep. 19	9	2 36 19.734	52 19 47.26
20	9	19.699	47.14
1900.72		19.717	47.20

42° 610.

Nov. 5		2 36 34.785	42 35 5.34
9		34.751	5.05
1900.85		34.768	5.20

51° 620.

Nov. 1	9½	2 36 38.193	51 59 16.57
2		38.166	16.55
1900.84		38.180	16.56

50° 613.

Nov. 12		2 36 40.181	51 6 28.82
13		40.219	28.68
1900.87		40.200	28.75

49° 752.

Sep. 21		2 36 45.901	49 57 33.63
24		45.953	34.07
1900.73		45.927	33.85

49° 753.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Sep. 25	9	2 36 47.878	50 10 18.99
26		47.833	19.11
1900.74		47.856	19.05

42° 613.

Sep. 27	9	2 37 4.819	42 46 53.67
28		4.819	53.81
1900.74		4.819	53.74

42° 614.

Oct. 16		2 37 6.201	43 6 45.51
20	7	6.193	45.74
1900.80		6.197	45.62

42° 615.

Nov. 28		2 37 6.664	42 11 44.21
		6.579	43.98
1900.91		6.621	44.10

40° 577.

Oct. 1		2 37 21.030	41 4 22.07
15		21.053	21.63
1900.77		21.041	21.85

48° 746.

Dec. 3		2 37 22.028	48 48 19.60
4		22.072	19.43
1900.92		22.050	19.51

50° 617.

Oct. 22	8½	2 37 24.209	50 47 57.16
23	8¾	24.170	57.48
1900.81		24.189	57.32

43° 566.

Oct. 24		2 37 34.269	43 52 18.69
25		34.271	18.52
1900.82		34.270	18.60

40° 581.

Nov. 26		2 37 52.928	40 21 34.20
26		52.926	34.52
1900.91		52.927	34.36

46° 622.

Oct. 26	7½	2 37 53.591	46 25 10.55
29		53.534	10.17
1900.82		53.562	10.36

40° 582.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Oct. 10		2 37 56.183	40 40 55.68
12		56.122	55.64
1900.78		56.152	55.66

50° 620.

Nov. 5		2 38 4.893	50 18 13.11
9		4.903	13.19
1900.85		4.898	13.15

44° 569.

Sep. 17		2 38 12.057	45 10 34.13
18		12.012	34.61
1900.71		12.034	34.37

50° 623.

Sep. 19		2 38 32.831	51 9 45.17
20		32.924	44.64
1900.72		32.878	44.90

48° 750.

Sep. 21	8	2 38 56.207	48 32 7.60
24		56.203	7.73
1900.73		56.205	7.67

47° 692.

Sep. 25		2 38 58.554	47 43 15.44
26		58.518	14.80
1900.74		58.536	15.12

41° 530.

Sep. 27		2 39 12.244	42 6 17.58
28		12.259	17.93
1900.74		12.251	17.76

46° 628.

Oct. 1		2 39 22.959	46 48 41.38
15		23.021	41.94
1900.77		22.990	41.66

50° 627.

Oct. 22	8¼	2 39 29.414	50 11 44.47
23		29.376	44.32
1900.81		29.395	44.40

40° 589.

Nov. 23		2 39 28.901	40 29 21.47
Dec. 5		28.877	21.38
1900.91		28.889	21.42

48° 752.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Oct. 8		2 39 35.551	48 56 21.50
9		35.532	21.54
1900.77		35.541	21.52

39° 628.

Oct. 16		2 39 37.847	40 11 27.05
20		37.821	27.18
1900.80		37.834	27.11

44° 573.

Oct. 24		2 39 44.394	45 1 44.41
25		44.427	44.75
1900.82		44.410	44.58

40° 590.

Nov. 28		2 39 47.548	41 2 22.67
		47.489	22.93
1900.91		47.519	22.80

51° 626.

Oct. 26	8¾	2 39 53.296	51 47 3.96
29	8¾	53.240	4.27
1900.82		53.268	4.11

43° 574.

Nov. 1		2 40 0.883	43 20 39.78
2		0.856	39.22
1900.84		0.870	39.50

51° 628.

Nov. 5	8½	2 40 6.398	51 43 41.28
9		6.389	41.36
1900.85		6.393	41.32

45° 660.

Nov. 12	8½	2 40 33.936	45 29 45.20
13	8¾	33.931	46.42
Dec. 7	9	33.946	46.01
1900.89		33.938	45.88

41° 538.

Nov. 26		2 40 42.584	41 45 18.68
27		42.574	18.86
1900.91		42.579	18.77

42° 628.

Dec. 3		2 40 53.108	42 58 56.55
4		53.102	56.63
1900.92		53.105	56.59

43° 576.

Date.	Mag.	R. A 1900.0. h m s	Decl. 1900.0 ° ′ ″
Oct. 10		2 40 58.943	43 51 8.55
12		58.939	8.94
1900.78		58.941	8.74

44° 577.

Sep. 17		2 41 0.698	44 50 43.65
18		0.688	44.46
1900.71		0.693	44.06

49° 773.

Sep. 19		2 41 5.104	49 39 33.56
20		5.167	33.37
1900.72		5.136	33.47

50° 630.

Sep. 21		2 41 5.963	51 7 57.33
24		6.013	57.36
1900.73		5.988	57.34

47° 698.

Sep. 25		2 41 20.277	47 46 42.51
26		20.285	42.22
1900.74		20.281	42.37

48° 760.

Sep. 27		2 41 25.450	48 48 5.72
28		25.415	6.11
1900.74		25.432	5.91

41° 541.

Oct. 1		2 41 26.302	41 26 54.78
15	8½	26.271	55.07
1900.77		26.287	54.92

50° 636.

Oct. 16		2 41 35.720	50 28 43.93
20		35.802	43.96
1900.80		35.761	43.94

47° 700.

Oct. 22		2 41 43.788	48 2 9.49
23		43.797	9.45
1900.81		43.792	9.47

43° 579.

Oct. 24		2 41 43.486	48 12 14.87
25		43.495	14.67
1900.82		43.490	14.77

46° 638.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Oct. 26		2 41 50.594	46 32 46.38
29		50.621	45.81
1900.82		50.608	46.10

48° 762.

Nov. 1		2 42 1.302	48 45 58.84
2	7½	1.291	58.61
1900.84		1.297	58.72

40° 602.

Nov. 5		2 42 4.298	40 33 39.96
9		4.314	40.03
1900.85		4.306	40.00

41° 543.

Nov. 12		2 42 12.579	41 59 48.68
13		12.600	48.76
1900.87		12.590	48.72

42° 633.

Nov. 26	8½	2 42 12.750	42 18 56.19
27		12.828	55.72
1900.91		12.789	55.96

47° 702.

Oct. 8		2 42 19.244	47 12 29.92
9	7¾	19.225	29.80
1900.77		19.234	29.86

48° 763.

Nov. 28		2 42 27.593	48 53 4.09
Dec. 7		27.555	4.06
1900.92		27.574	4.08

46° 641.

Dec. 3	7¼	2 42 28.253	46 48 3.30
4		28.275	3.63
1900.92		28.264	3.47

51° 633.

Nov. 23		2 42 28.115	51 13 36.63
Dec. 5		28.156	36.36
1900.91		28.136	36.50

43° 580.

Oct. 10		2 42 34.688	43 53 51.49
12		34.686	51.27
1900.78		34.687	51.38

48° 764.

Date	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Sep. 17		2 42 43.256	48 27 48.53
18		43.198	49.07
1900.71		43.227	48.80

45° 662.

Sep. 19	8	2 42 54.925	45 59 9.91
20		54.937	9.95
1900.72		54.931	9.93

49° 782.

Sep. 21		2 42 58.888	49 35 54.14
24		58.865	53.54
1900.73		58.877	53.84

44° 582.

Sep. 25		2 43 4.812	44 59 17.49
26		4.787	17.21
1900.74		4.800	17.35

47° 709.

Oct. 22		2 43 21.290	47 43 50.51
23		21.236	50.60
1900.81		21.263	50.56

43° 583.

Sep. 27	8¾	2 43 26.374	43 23 51.93
28	8¾	26.374	52.38
1900.74		26.374	52.16

42° 637.

Oct. 1		2 43 27.600	42 23 3.40
15		27.586	3.04
1900.77		27.593	3.22

46° 644.

Oct. 16		2 43 34.634	46 59 52.36
20		34.611	52.74
1900.80		34.622	52.55

40° 610.

Oct. 24		2 43 51.569	40 24 15.47
25		51.632	15.57
1900.82		51.600	15.52

47° 711.

Oct. 26		2 43 53.282	47 52 32.79
29		53.260	33.17
1900.82		53.271	32.98

45° 665.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Nov. 1		2 44 0.495	45 25 20.96
2		0.446	20.79
1900.84		0.470	20.88

40° 612.

Nov. 5	S.p.	2 44 5.767	40 52 57.44
9		5.724	57.45
1900.85		5.746	57.44

42° 638.

Nov. 12		2 44 6.258	42 54 0.34
13		6.316	0.84
1900.87		6.287	0.59

41° 550.

Oct. 8		2 44 7.299	41 31 48.00
9		7.320	48.13
1900.77		7.310	48.07

43° 586.

Nov. 26		2 44 6.704	43 56 39.22
27		6.829	39.36
1900.91		6.767	39.29

45° 667.

Nov. 28		2 44 9.638	45 39 29.88
		9.511	30.17
1900.91		9.574	30.02

48° 770.

Dec. 3		2 44 19.646	48 56 9.63
4		19.639	9.34
1900.92		19.642	9.49

47° 714.

Nov. 23		2 44 39.907	48 5 31.97
Dec. 5		39.930	31.45
1900.91		39.919	31.71

45° 669.

Sep. 17		2 44 55.664	45 34 25.74
18		55.610	25.67
1900.71		55.637	25.70

46° 618.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Sep. 19		2 44 59.843	46 25 45.07
20		59.849	45.64
1900.72		59.846	45.36

44° 591.

Sep. 21		2 45 6.764	44 38 47.64
24		6.725	47.60
1900.73		6.744	47.62

44° 593.

Sep. 25		2 45 16.849	44 28 53.86
26		16.875	54.25
1900.74		16.862	54.06

48° 777.

Oct. 22	8½	2 45 20.216	48 28 14.06
23		20.163	14.05
1900.81		20.190	14.06

47° 720.

Sep. 27		2 45 37.418	47 30 3.03
28		37.340	3.27
1900.74		37.379	3.15

48° 782.

Oct. 1	8½	2 45 38.677	49 5 23.74
15		38.738	24.03
1900.77		38.708	23.89

47° 721.

Oct. 16	8¼	2 45 50.903	48 0 30.73
20		50.925	30.44
1900.80		50.914	30.59

43° 593.

Oct. 24		2 45 52.816	43 21 42.43
25		52.879	42.99
1900.82		52.848	42.71

41° 556.

Date.	Mag.	R. A. 1900 0. h m s	Decl. 1900.0. ° ′ ″
Oct. 26		2 45 54.735	41 36 32.93
29		54.762	33.09
1900.82		54.749	33.01

42° 643.

Oct. 10		2 46 6.232	42 21 28.13
12		6.272	27.89
1900.78		6.252	28.01

46° 652.

Sep. 17	7	2 47 16.628	46 45	6.31
18		16.658		6.08
1900.71		16.643		6.20

Anon.

Sep. 19	9½	2 48 14.252	42 47 29.39
Oct. 15	9¼	14.155	29.15
1900.75		14.203	29.27

42° 650.

Sep. 20	N.f.	2 48 26.783	42 48 20.84
Oct. 1		26.756	20.77
1900.74		26.770	20.80

46° 656.

Sep. 21		2 48 48.484	46 53 50.88
24		48.476	51.33
1900.73		48.480	51.10

45° 679.

Sep. 25		2 49 15.002	45 26 0.77
26		15.041	0.99
1900.74		15.021	0.88

44° 598.

Sep. 27	8¾	2 49 28.893	44 34 37.32
28	8½	28.887	37.40
1900.74		28.890	37.36

(6) **The Second List.** Sufficient description of the object of this work, and of the history, has already been given, in the introduction to the first list. The star noted as V Tauri, $4^h\ 46^m\ 15^s$, in CHANDLER'S Catalogue of variables, was on the original list, but was too faint to observe—below tenth magnitude—on the two occasions when it was looked for. It declines to 13.5 at minimum.

A few stars of this list culminate slightly North of our zenith, but all have been observed facing to the South, for the elimination of systematic error due to the star's apparent direction of motion, and for the elimination of bisection error. Since the stars of the first list were all observed facing North, the comparison of the reduction constants upon nights when parts of each list were observed, furnishes a check upon these sources of error. The Fundamental stars employed, for the two lists, are distinct, and it is necessary to assume that there are no systematic differences between the two groups of Fundamentals. The following results are based upon the observations of 14 nights, with from 4 to 8 stars observed North, and from 4 to 6 South, each night. With NEWCOMB'S places, there are derived the following mean differences:

$$\Delta \text{ R. A. (N—S)} = -0^s.008 \qquad \pm 0^s.007$$
$$\Delta \text{ Decl. (N—S)} = +0''.07 \qquad \pm 0''.02$$

These differences include double the transit error depending upon the apparent direction of motion, and double the bisection error.

As a further test of the Declinations, the Latitude observations of the 14 nights are combined, here, for a comparison.

Circumpolar Stars,	$\varphi = 25''.78$	28 Obs.	
Stars North of Zenith,	$\varphi = 26\ .00$	80 "	Decl. $+49°$
Stars South of Zenith,	$\varphi = 25\ .93$	66 "	" $+22°$

Flexure and Refraction errors have perhaps contributed to the observed difference between determinations made at small zenith distances, and those made near the Pole. The Flexure correction for this instrument is, however, very small; the value of the semi-horizontal flexure, derived from a long series of measures, being less than $0''.1$.

The Poulkova Refractions, used here hitherto, appear to be too large for observations made at large zenith distances, a subject which has been already discussed tentatively, in the reduction of the PIAZZI stars. The effect of smaller Refraction corrections would be to increase the values of the Latitude from the Circumpolar stars, thus bringing the results into better conformity in this series, with the stars at smaller zenith distances.

Differences of Flexure and of Refraction may be considered as entirely negligible, in the reduction of the places of the stars to be determined.

(7) **The Fundamental Stars.** The places of the following list of 23 stars, used in the reduction of this series, are taken from *Newcomb's Catalogue of Fundamental Stars*, for 1900, and his proper motions have been included. The mean Declination of the list, $+23°$, is very nearly that of the list to be determined.

The places of 13 stars of this list have been compared with those given by

Doctor AUWERS, in his discussion of the corrections to the A. G. C. stars. The mean differences are as follows:

Newcomb—Auwers: R. A. $+0^s.021$ $v \pm 0^s.006$
Decl. $0''.00$ $v \pm 0''.08$

In the table following there are included the observed corrections to the adopted places. These depend strictly, for any one star, upon the adopted places of the remaining stars, observed at the time. The number of Fundamentals used varies, from four for one hour of observing, to eight for a full night of four to five hours. The values of the observed Latitude from each star are included in the table. The correction for the Variation was nearly constant during this period, and the mean value $0''.09$ has been accordingly applied to the mean of the observed Latitudes.

Following the Fundamental stars, there are tabulated the Latitudes from the separate Circumpolar stars, used in this series only. For a portion of the nights, the same stars that were used for azimuth, in the observations of the first list, served also for this list.

There is also tabulated a comparison of the results obtained by the simultaneous use of both circles, in the readings upon the stars and Nadir. The movable circle was East, and was shifted each night of observation. But four nights are available here, in addition to those of which a discussion was given in the introduction to the first list. The Δ (E−W) is slightly larger than that obtained in the first series.

FUNDAMENTAL STARS, 1900.0, NEWCOMB. OBSERVED CORRECTIONS.

Star.	Mag.	R. A. 1900.0.	Pr. Mo.	Decl. 1900.0.	Pr. Mo.	No.	R. A.	Decl.	φ
		h m s	s	° ′ ″	″		s	″	″
α Triang.	3.6	1 47 22.746	+0.0015	+29 5 30.31	−0.231	10	−0.023	−0.64	26.47
β Arietis	2.7	1 49 6.836	+ .0064	20 19 9.36	− .111	7	+ .010	− .23	26.16
λ Arietis	4.8	1 52 21.300	− .0059	23 6 30.18	− .018	13	− .027	+ .36	25.60
α Arietis	2.2	2 1 32.058	+ .0139	22 59 22.82	− .144	10	− .003	− .16	25.96
β Triang.	3.1	2 3 35.454	+ .0126	34 30 51.70	− .044	8	− .006	− .23	26.08
η Triang.	4.1	2 11 22.030	+ .0040	33 23 5.20	− .052	2	+ .030	− .24	25.84
θ Arietis	5.7	2 12 33.708	− .0007	19 26 19.12	− .003	6	+ .011	+ .32	25.69
27 Arietis	6.4	2 25 21.514	+ .0029	17 15 41.82	− .089	1	+ .025	− .11	25.99
δ Arietis	4.6	3 5 54.563	+ .0110	19 20 55.02	+ .001	20	+ .014	− .32	26.13
ζ Arietis	5.0	3 9 9.108	− .0019	20 40 26.03	− .082	20	+ .034	+ .32	25.64
τ_1 Arietis	5.2	3 15 27.139	+ .0023	20 47 11.91	− .033	3	− .005	+ .30	25.46
11 Tauri	6.7	3 34 47.850	+ .0014	25 0 22.26	− .008	2	− .038	− .17	25.96
ω Tauri	5.3	4 0 49.447	− .0051	28 43 51.45	− .001	4	− .011	− .02	25.98
54 Persei	5.1	4 13 54.947	− .0015	34 19 31.18	− .012	5	− .016	+ .32	25.62
τ Tauri	4.3	4 36 14.529	+ .0007	22 45 54.59	− .019	6	+ .010	− .04	25.72
$\varkappa$ Tauri	5.6	4 52 2.163	+ .0023	24 53 45.50	− .061	3	− .022	+ .75	25.05
ι Tauri	4.7	4 57 7.077	+ .0056	21 26 49.66	− .049	5	− .014	+ .68	25.08
11 Orionis	4.7	4 58 51.259	+ .0013	15 15 53.76	− .036	3	+ .011	− .17	25.98
ζ Tauri	3.0	5 31 40.082	+ .0006	21 4 53.67	− .032	3	+ .011	+ .16	25.68
ν Orionis	4.5	6 1 51.763	+ .0012	14 46 49.71	− .025	4	− .001	− .32	25.84
ξ Orionis	4.4	6 6 15.306	+ .0014	14 13 52.68	− .033	10	− .038	+ .20	25.59
$\varkappa$ Orionis	5.1	6 10 49.710	+ .0060	12 18 0.57	+ .187	4	+ .023	− .63	26.35
μ Gemin.	3.2	6 16 54.663	+ .0047	22 33 54.13	− .114	2	+ .014	− .19	25.96
Mean Mag.	4.5	P. E. one obs. R.A.	±0s.019	P. E. one obs. Decl.	±0″.19	Mean			25.82
						φ_0			25.91
						P. E. one star			±0.23
						P. E. one obs. φ			±0.22

COMPARISON OF CIRCLES WEST AND EAST.

	Obs. Corr.			Obs. φ		Δ
	W.	E.	No.	W.	E.	E. − W.
α Triang.	−0.″54	−0.″44	4	26.″27	26.″38	+0.″11
λ Arietis	+0.45	+0.54	3	26.50	26.67	+ .17
δ Arietis.	−0.27	−0.32	4	26.07	26.30	+ .23
ζ Arietis	+0.49	+0.37	4	25.50	25.78	+ .28
			Means	25.83	26.03	+0.20

LATITUDE FROM CIRCUMPOLAR STARS.

Star.	R. A.		Decl.		No.	φ
	h	m	°	′		″
50 Cass.	1	54	71	56	8	25.56
36 H. Cass.	2	28	72	23	1	25.58
19 H. Cam.	5	6	79	7	1	25.71
23 H. Cam.	6	29	79	40	2	25.27
4 Urs. Min. L. C.	14	9	78	1	6	25.92
γ Urs. Min. L. C.	15	20	72	11	2	26.27
A. Draco. L. C.	16	28	68	59	2	25.48
χ Draco. L. C.	18	22	72	41	1	24.81

(8) **The Observed Places.** The magnitudes of the following list, when given in tenths, are from the published Bulletin of the Astrophotographic Conference. Those given in fractions are from the estimates made here at the time of observation, when the brightness appeared to differ from that of the published list. The Precessions for 1900 are given with the places.

There are 353 stars in this list. The observations were made upon 28 nights, four of which were broken off by clouds, between November 1, 1900, and January 29, 1901. About 900 observations are included, counting the Circumpolar stars and Nadirs. The microscopes were read by Dr. CRAWFORD, for 400 observations, upon 15 nights. The reductions were completed without assistance.

The following *Errata* are to be corrected, in the first publication of these results, L. O. Bulletin No. 2:

Page 10 . .	38°425	2h	4m	48s		Decl. 2″.50	in place of 2″.60
Page 10 . .	34 454	2	26	3.373	R. A.		in place of 5s.373
Page 10 . .	30 494	3	3	42.921	R. A.		in place of 42.971
Page 11 . .	26 608	3	39	12.107	R. A.		in place of 12.123
Page 11 . .	24 589	3	46	54.595	R. A.		in place of 54.295
Page 11 . .	22 612	3	53	57.296	R. A.		in place of 57.286
Page 11 . .	23 609	3	58	22		Decl. 50″.88	in place of 50″.90
Page 11 . .	21 612	4	10	37.692	R. A.		in place of 37s.722
Page 12 . .	19 782	4	41	51.397	R. A.		in place of 51.407
Page 12 . .	16 697	5	1	14		Decl. 40″.01	in place of 39″.97

SECOND LIST OF EROS STARS.

Star.	Mag.	R. A. 1900.0.	Prec.	Decl. 1900.0.	Prec.	Star.	Mag.	R. A. 1900.0.	Prec.	Decl. 1900.0.	Prec.
°		h m s	s	° ′ ″	″	°		h m s	s	° ′ ″	″
37 480	8.9	2 0 9.189	3.5921	37 48 54.28	+17.361	34 488	8.8	2 34 24.785	3.6537	34 51 29.86	+15.671
38 413	8.2	2 21.491	3.6220	38 55 17.43	17.262	34 492	9	34 51.548	3.6453	34 24 26.14	15.647
38 418	8.4	2 57.612	3.6284	39 7 3.63	17.234	33 493	8½	36 31.061	3.6277	33 20 24.86	15.555
37 490	8.8	3 56.221	3.6140	38 11 25.36	17.191	32 490	7.4	36 38.527	3.6100	32 28 32.39	15.548
36 421	8.7	4 4.076	3.5790	36 18 59.09	17.185	33 494	8½	37 16.732	3.6386	33 44 52.08	15.514
36 426	8.8	4 37.569	3.5983	37 13 44.50	17.159	32 498	8¾	39 4.275	3.6139	32 19 51.31	15.413
38 423	8.8	4 41.602	3.6179	38 13 52.41	17.156	31 477	8.4	40 19.039	3.6017	31 34 26.99	15.343
38 425	6.1	4 48.718	3.6249	38 34 2.50	17.151	33 512	8¾	41 27.431	3.6396	33 13 1.39	15.279
36 427	7.8	5 25.277	3.5942	36 52 50.80	17.124	32 508	8	43 1.109	3.6271	32 25 40.39	15.191
36 428	8.5	5 53.464	3.5890	36 29 45.16	17.103	32 507	8	43 1.136	3.6342	32 45 33.08	15.190
38 434	8.7	6 40.544	3.6293	38 24 58.27	17.067	31 483	8.6	43 9.547	3.6120	31 41 46.68	15.181
36 435	8.4	6 45.233	3.6000	36 54 0.94	17.063	31 490	6.5	44 23.272	3.6124	31 33 32.31	15.111
37 505	8.5	7 52.473	3.6244	37 56 20.40	17.011	31 493	7¾	44 56.008	3.6222	31 57 0.90	15.080
36 440	8.6	7 53.507	3.6090	37 8 58.33	17.010	32 517	8.1	45 56.884	3.6332	32 19 47.58	15.022
37 506	8¼	8 4.477	3.6298	38 10 15.26	17.002	31 497	7.0	47 21.887	3.6135	31 14 7.18	14.939
37 512	8½	9 25.382	3.6300	37 55 1.50	16.939	32 522	7¾	47 34.804	3.6416	32 30 33.80	14.926
36 446	7.8	9 52.914	3.6000	36 18 18.70	16.917	31 500	8	48 4.368	3.6303	31 55 43.03	14.898
36 450	8.8	10 27.207	3.6094	36 40 59.51	16.891	30 464	7.0	49 39.368	3.6067	30 38 14.12	14.805
37 514	8.6	10 54.313	3.6309	37 40 56.22	16.869	30 465	7½	49 50.615	3.6188	31 10 30.04	14.794
36 453	8½	11 8.227	3.6185	37 1 10.91	16.858	30 466	7¾	50 30.103	3.6054	30 28 34.33	14.754
37 516	8.5	11 14.710	3.6259	37 22 7.64	16.857	31 509	4.8	51 12.984	3.6300	31 31 53.89	14.712
37 518	8¾	11 49.141	3.6332	37 37 27.52	16.826	30 469	7.8	51 58.161	3.6229	31 6 52.88	14.667
36 458	7.5	12 32.929	3.6089	36 36 16.42	16.791	31 511	8½	52 5.726	3.6342	31 36 55.27	14.660
36 464	7½	14 57.594	3.6244	36 36 44.91	16.674	31 512	6.6	52 12.878	3.6442	32 3 26.46	14.653
36 465	8.5	15 10.013	3.6323	36 57 53.16	16.665	30 474	8.3	53 52.647	3.6081	30 12 27.55	14.552
36 465	9	15 10.220	3.6322	36 57 51.03	16.665	30 477	7.5	54 13.489	3.6202	30 43 39.57	14.532
36 470	8.4	17 13.137	3.6426	37 6 15.50	16.564	29 508	8.3	54 24.991	3.6087	30 10 18.01	14.520
36 473	8.5	17 36.710	3.6346	36 38 51.34	16.544	31 524	8¼	55 10.497	3.6406	31 33 29.99	14.476
36 478	7.2	19 9.864	3.6406	36 39 59.80	16.467	30 479	9	56 6.802	3.6220	30 35 28.90	14.417
35 470	8.3	19 20.774	3.6178	35 31 8.40	16.458	29 517	8.5	57 39.199	3.6154	30 7 7.33	14.324
34 432	7.2	19 25.316	3.5995	34 35 21.32	16.455	30 482	8.7	58 31.683	3.6352	30 55 10.08	14.266
36 482	7.5	19 44.328	3.6407	36 33 39.55	16.424	30 484	8¼	58 51.350	3.6300	30 38 55.79	14.250
34 435	8¼	20 8.237	3.5982	34 24 6.98	16.419	28 488	7.9	59 18.334	3.5984	29 9 9.41	14.222
34 437	6.9	20 45.264	3.6154	35 9 50.19	16.388	29 519	8.6	59 41.092	3.6208	30 8 16.31	14.198
36 491	7.7	21 8.836	3.6444	36 31 1.64	16.368	29 522	7.5	3 0 48.102	3.6235	30 8 28.87	14.126
35 477	8.5	22 1.284	3.6262	35 29 1.50	16.324	28 493	7.7	1 16.444	3.5939	28 44 13.65	14.100
34 442	8.3	22 26.876	3.6147	34 51 0.30	16.302	28 499	6.0	3 35.683	3.5982	28 41 42.59	13.954
35 480	8.9	22 51.143	3.6236	35 13 12.03	16.281	30 494	9	3 42.921	3.6502	31 0 59.56	13.947
35 490	7.5	24 41.798	3.6391	35 40 21.07	16.187	29 531	8.8	4 13.757	3.6125	29 17 5.63	13.915
33 447	8.9	24 57.987	3.6041	33 54 54.74	16.173	29 534	8.0	5 54.306	3.6201	29 27 14.03	13.809
34 448	8.0	25 4.172	3.6159	34 29 14.50	16.167	30 503	8.7	6 50.793	3.6454	30 28 37.67	13.749
35 494	8.8	25 5.039	3.6329	35 18 45.25	16.167	28 507	8	7 34.964	3.6106	28 51 27.19	13.702
34 449	8.8	25 6.738	3.6257	34 57 19.92	16.165	28 511	8.1	11 1.891	3.6076	28 23 24.76	13.480
35 497	5.6	25 59.860	3.6442	35 42 13.23	16.119	27 488	8.6	11 2.174	3.6015	28 6 59.51	13.480
34 454	7	26 3.373	3.6141	34 14 9.13	16.115	28 514	8½	12 24.884	3.6095	28 20 49.36	13.390
34 457	8¼	26 29.206	3.6277	34 50 17.53	16.094	27 492	7.8	13 38.058	3.5861	27 10 43.11	13.311
33 454	6	26 50.261	3.6137	34 6 3.18	16.076	28 516	5.2	14 17.237	3.6211	28 41 9.24	13.268
33 461	6.6	28 12.649	3.6029	33 21 10.60	16.003	28 517	8½	14 37.026	3.6168	28 27 57.51	13.247
34 462	7.0	28 12.910	3.6307	34 42 41.28	16.003	27 500	5.8	16 11.608	3.5927	27 14 54.40	13.142
33 462	8.2	28 31.057	3.6063	33 28 32.29	15.987	27 501	8.7	16 58.072	3.5960	27 19 44.49	13.092
33 463	7.6	28 40.278	3.6102	33 38 41.12	15.979	26 548	7.1	17 6.071	3.5788	26 32 37.46	13.083
34 469	5.6	29 42.565	3.6259	34 15 4.52	15.923	26 550	8.4	17 32.518	3.5908	27 2 43.86	13.053
34 471	7.3	29 45.997	3.6268	34 17 17.65	15.921	28 526	7.3	18 45.570	3.6216	28 17 58.03	12.973
34 476	7.5	31 44.840	3.6388	34 43 40.80	15.815	28 532	7.1	20 31.298	3.6263	28 21 59.46	12.866
33 476	8.0	32 30.171	3.6281	33 56 1.79	15.773	27 509	9.0	21 36.672	3.6067	27 24 9.82	12.781
34 483	8.8	32 41.171	3.6477	34 50 21.90	15.764	26 565	8.7	24 19.737	3.5954	26 40 47.90	12.597
32 478	6.9	32 43.476	3.6090	32 59 9.80	15.763	27 513	8.2	24 58.291	3.6126	27 22 55.81	12.553
32 483	7½	33 45.698	3.6138	33 3 52.82	15.706	26 566	8.1	25 0.838	3.5987	26 46 14.22	12.550
33 481	7.5	33 47.003	3.6232	33 31 5.92	15.705	27 514	8.0	25 0.950	3.6129	27 23 22.68	12.550
32 484	7½	33 49.595	3.6000	32 23 0.90	15.702	27 515	6.2	25 17.660	3.6098	27 13 49.74	12.532

Star.	Mag.	R. A. 1900.0.	Prec.	Decl. 1900.0.	Prec.
°		h m s	s	° ′ ″	″
27 515	6.0	3 25 18.522	3.6098	27 13 49.25	+12.532
27 519	8½	26 33.700	3.6307	28 1 34.01	12.444
26 572	8.3	28 57.173	3.5944	26 16 22.63	12.280
26 574	8.5	29 19.202	3.6007	26 30 58.91	12.254
27 525	8¾	29 20.817	3.6163	27 11 28.44	12.252
27 526	8¼	29 22.554	3.6240	27 30 46.52	12.250
27 529	8.1	30 1.620	3.6192	27 15 36.70	12.204
26 579	8¾	30 6.088	3.6135	27 0 40.78	12.200
25 580	8.0	31 9.964	3.5844	25 40 3.86	12.126
25 584	8.9	33 29.109	3.5913	25 48 4.78	11.964
26 590	8.5	33 29.703	3.6169	26 53 46.88	11.963
26 596	8.6	34 11.988	3.6103	26 33 45.51	11.913
24 533	7.9	35 20.260	3.5687	24 41 5.48	11.833
24 534	8.1	35 42.895	3.5777	25 2 54.95	11.806
26 601	7.5	36 27.677	3.6069	26 15 11.23	11.753
25 593	7¼	37 7.253	3.5872	25 21 45.23	11.707
25 598	8.4	37 38.693	3.5996	25 48 29.18	11.669
25 597	8½	37 38.947	3.5900	25 27 9.26	11.669
24 537	7.9	37 44.769	3.5744	24 45 51.17	11.662
25 599	8.0	37 44.844	3.6046	26 3 48.23	11.662
25 600	8¼	37 52.815	3.5896	25 24 36.74	11.653
24 546	5.0	39 11.633	3.5711	24 31 31.96	11.559
26 608	8.5	39 12.107	3.6192	26 34 39.08	11.559
24 547	4.5	39 15.281	3.5626	24 9 13.07	11.555
25 607	8.5	39 33.021	3.5896	25 17 50.98	11.534
24 553	6.0	39 56.931	3.5657	24 14 32.71	11.505
25 611	8.4	39 58.310	3.6012	25 45 48.08	11.504
24 562	7.0	41 1.791	3.5666	24 12 36.38	11.427
24 568	8½	41 47.082	3.5879	25 4 38.31	11.373
24 571	7.1	42 8.007	3.5792	24 40 48.72	11.348
26 617	8.0	42 16.556	3.6172	26 16 50.10	11.337
25 620	8.5	42 41.169	3.5991	25 29 34.49	11.308
23 561	6.5	43 24.128	3.5669	24 4 32.08	11.256
23 562	8.2	43 28.672	3.5640	23 56 32.96	11.252
25 624	6.3	44 18.104	3.5965	25 16 40.40	11.191
24 578	8.1	44 29.946	3.5713	24 11 30.48	11.177
23 570	7.5	44 55.513	3.5596	23 39 33.28	11.147
25 627	8.3	45 17.280	3.6165	26 3 6.89	11.120
24 583	7½	45 25.733	3.5884	24 51 38.97	11.109
25 631	8¼	45 55.568	3.6091	25 41 56.28	11.072
24 587	7.6	46 12.508	3.5897	24 52 0.62	11.052
24 589	8.8	46 54.595	3.5801	24 25 3.35	11.002
25 637	8.6	47 6.642	3.5998	25 14 12.23	10.987
25 639	8.3	47 28.190	3.6100	25 38 16.50	10.960
25 641	6.9	47 33.072	3.6040	25 23 8.78	10.956
23 584	8.8	49 4.541	3.5655	23 39 46.44	10.842
24 595	8.4	49 7.583	3.5927	24 48 41.14	10.838
23 586	8.4	49 50.845	3.5636	23 32 8.97	10.785
23 589	8¼	50 40.768	3.5593	23 18 14.50	10.723
24 598	7.8	51 11.027	3.6000	24 59 31.53	10.686
24 599	6.6	51 27.590	3.5808	24 10 19.40	10.666
23 594	7½	52 22.751	3.5731	23 47 39.76	10.598
23 600	7½	53 6.430	3.5634	23 20 30.00	10.544
24 602	8.5	53 13.156	3.6014	24 55 47.38	10.536
24 605	8.6	53 54.454	3.5909	24 24 42.83	10.485
22 612	8.9	53 57.296	3.5549	22 56 0.53	10.481
22 613	8.9	54 11.410	3.5595	23 6 55.89	10.463
22 615	8¾	54 34.911	3.5465	22 32 28.63	10.434
22 617	7½	55 0.390	3.5559	22 55 11.82	10.402
22 617	8.4	55 0.849	3.5559	22 55 6.36	10.401

Star.	Mag.	R. A. 1900.0.	Prec.	Decl. 1900.0.	Prec.
°		h m s	s	° ′ ″	″
23 606	8¼	3 57 48.910	3.5883	24 7 32.09	+10.191
23 609	6.2	58 22.772	3.5820	23 49 50.89	10.148
23 611	8.7	58 52.446	3.5683	23 14 5.23	10.112
23 613	8.2	59 17.130	3.5758	23 31 26.14	10.082
22 629	8.4	59 27.280	3.5609	22 53 44.72	10.068
23 617	8.6	4 0 39.559	3.5709	23 14 51.27	9.977
21 593	8.7	2 20.153	3.5374	21 45 15.49	9.847
23 624	7.5	2 52.483	3.5822	23 36 19.20	9.808
22 637	7.9	2 56.306	3.5637	22 49 54.93	9.803
22 637	7.8	2 56.342	3.5637	22 50 0.14	9.803
23 632	7.2	4 17.530	3.5867	23 43 5.38	9.700
21 601	8.9	5 14.198	3.5376	21 37 27.21	9.627
23 642	7.1	6 26.514	3.5796	23 19 0.83	9.533
23 645	8.0	6 48.040	3.5787	23 15 48.68	9.508
22 649	6.3	6 55.390	3.5520	22 9 23.00	9.498
22 654	8¼	8 2.303	3.5605	22 27 10.95	9.411
22 657	7.2	8 33.665	3.5550	22 11 56.03	9.371
23 650	8.9	8 34.709	3.5774	23 7 25.27	9.369
21 610	8.7	9 17.880	3.5473	21 50 41.79	9.314
22 663	8.6	10 3.570	3.5703	22 43 0.95	9.254
21 612	8.9	10 37.692	3.5442	21 39 32.51	9.211
22 665	8.4	10 52.905	3.5792	23 5 27.02	9.192
21 617	8.3	11 55.005	3.5565	22 6 28.47	9.110
21 618	5.7	12 28.102	3.5384	21 20 5.49	9.067
20 731	8.2	13 7.127	3.5324	21 3 22.91	9.016
20 733	6.2	13 32.374	3.5291	20 54 1.50	8.984
21 623	5.5	13 41.447	3.5445	21 31 54.57	8.971
20 740	7.3	15 37.506	3.5288	20 48 8.34	8.819
20 741	7.3	15 41.384	3.5324	20 56 58.52	8.815
20 744	6.7	16 29.756	3.5244	20 35 5.60	8.752
21 635	8.8	17 27.241	3.5389	21 8 44.30	8.677
20 751	6.6	17 38.777	3.5295	20 44 56.26	8.660
21 639	8.8	18 6.043	3.5434	21 18 28.51	8.625
21 641	7.3	18 18.311	3.5483	21 30 17.76	8.609
21 642	4.5	19 24.470	3.5632	22 3 53.89	8.522
21 643	5.7	19 27.548	3.5610	21 58 16.60	8.517
20 754	8½	19 53.553	3.5354	20 54 30.10	8.484
21 644	7.8	20 22.854	3.5440	21 14 36.20	8.444
20 756	8.8	21 13.468	3.5333	20 45 58.20	8.378
21 647	6.5	22 4.604	3.5494	21 23 49.10	8.309
20 760	8.9	22 44.282	3.5308	20 36 35.39	8.257
19 727	8.4	22 45.580	3.5046	19 31 8.40	8.258
20 761	8	22 48.913	3.5272	20 27 18.25	8.250
19 731	7.7	24 25.951	3.5085	19 37 20.54	8.121
19 733	8.7	25 22.837	3.5164	19 55 2.49	8.053
20 772	8.9	25 45.620	3.5325	20 34 3.69	8.015
21 657	7½	26 12.028	3.5538	21 25 2.76	7.980
19 735	7.8	27 10.373	3.4990	19 8 10.58	7.902
19 736	8.7	27 31.762	3.5106	19 36 6.89	7.873
20 778	8.3	28 51.801	3.5438	20 53 43.41	7.765
19 740	7.7	29 47.971	3.5160	19 45 47.49	7.717
19 742	6.1	29 50.800	3.5142	19 40 31.07	7.686
19 744	7.8	30 43.121	3.5120	19 33 18.04	7.616
19 745	8.2	30 51.356	3.5056	19 17 22.06	7.605
20 785	6.0	32 21.857	3.5360	20 29 1.46	7.482
18 666	8.6	32 41.756	3.4887	18 32 0.16	7.455
19 755	8.9	35 42.504	3.5222	20 4 13.34	7.209
19 759	8.9	35 51.286	3.5242	19 53 44.24	7.198
18 684	7.3	37 1.378	3.4918	18 31 56.52	7.103
19 774	8½	39 43.389	3.5086	19 8 37.99	6.881

Star.	Mag.	R. A. 1900.0.	Prec.	Decl. 1900.0.	Prec.
°		h m s	s	° ′ ″	″
18 717	7.5	4 40 15.094	3.4961	18 37 3.00	+6.838
18 719	6.2	40 26.452	3.4947	18 33 13.70	6.823
19 777	8.5	40 44.134	3.5134	19 18 43.93	6.798
18 725	8.8	41 3.980	3.5035	18 53 56.56	6.770
18 727	7.9	41 17.858	3.4892	18 18 27.48	6.751
19 782	8.8	41 51.397	3.5100	19 8 22.13	6.706
17 789	8.1	42 47.582	3.4735	17 37 49.16	6.629
18 734	7.2	42 50.781	3.4959	18 32 33.90	6.623
18 738	8¼	44 27.385	3.5077	19 1 10.58	6.506
17 791	8.7	44 32.145	3.4679	17 20 53.74	6.484
18 743	5.2	45 31.436	3.5008	18 40 10.93	6.403
17 797	8.9	46 3.326	3.4730	17 31 16.93	6.358
17 800	Var.	46 15.0	3.4694	17 22 . . .	6.342
18 747	7.7	47 44.356	3.5080	18 54 24.99	6.217
19 811	6.8	49 5.655	3.5192	19 19 24.26	6.105
18 754	8.7	49 19.971	3.4935	18 16 48.56	6.085
17 814	8¼	50 41.319	3.4836	17 50 43.86	5.973
16 671	7	51 1.886	3.4527	16 34 36.00	5.943
16 672	5.9	51 35.770	3.4632	16 59 48.27	5.898
18 765	8.9	52 30.159	3.5092	18 50 19.61	5.821
16 679	8.7	54 6.950	3.4568	16 40 41.37	5.685
16 685	8.8	56 8.524	3.4580	16 41 12.79	5.516
16 688	8.8	58 17.870	3.4664	16 59 5.27	5.333
18 777	7.9	59 0.354	3.4947	18 6 53.04	5.274
17 841	8.9	5 0 28.847	3.4846	17 40 51.82	5.150
16 697	8.5	1 14.720	3.4601	16 41 40.01	5.084
16 700	8.9	2 11.373	3.4647	16 50 52.64	5.005
15 749	7.6	2 21.687	3.4372	15 43 24.75	4.990
15 752	5.0	3 58.471	3.4317	15 28 10.13	4.852
17 862	8.1	4 51.922	3.4775	17 18 52.49	4.777
16 715	8.4	5 4.406	3.4527	16 18 32.66	4.760
15 759	6.4	5 56.868	3.4435	15 55 19.42	4.685
16 721	8.6	6 6.438	3.4607	16 37 10.58	4.673
17 867	8¼	6 24.158	3.4738	17 8 26.24	4.647
17 869	8¼	6 42.457	3.4727	17 5 31.30	4.620
16 732	8.8	7 28.399	3.4649	16 45 52.80	4.556
16 735	8.4	8 33.931	3.4603	16 33 41.50	4.462
15 769	8.8	9 42.128	3.4349	15 30 56.49	4.366
16 741	8.2	10 55.284	3.4698	16 54 31.11	4.262
16 742	7.7	11 20.053	3.4534	16 14 30.02	4.227
15 779	8½	11 25.001	3.4267	15 9 13.38	4.219
15 787	8.3	13 54.840	3.4404	15 40 53.62	4.005
15 789	9.0	14 18.577	3.4489	16 1 7.08	3.971
14 881	8.2	14 53.248	3.4229	14 57 26.58	3.922
15 790	8.4	14 59.350	3.4372	15 32 7.04	3.912
15 795	7.9	15 54.873	3.4427	15 44 55.14	3.833
15 797	8½	16 14.858	3.4489	15 59 38.16	3.805
15 799	7½	16 38.256	3.4498	16 1 33.71	3.772
15 805	7.8	17 46.722	3.4482	15 56 43.50	3.673
15 809	8.9	19 22.230	3.4320	15 16 14.66	3.537
15 810	8.7	19 54.052	3.4376	15 29 27.08	3.491
15 813	7.5	20 10.713	3.4345	15 21 52.40	3.466
15 814	7.5	20 18.608	3.4399	15 34 58.12	3.456
15 822	6.5	21 30.721	3.4301	15 10 17.30	3.351
14 914	8.6	21 59.612	3.4027	14 3 1.84	3.310
15 826	5.5	22 0.870	3.4455	15 47 22.57	3.308
14 917	8.5	22 9.786	3.4243	14 55 49.01	3.295
15 837	6.3	5 24 42.772	3.4337	15 16 58.70	+3.075
14 933	8.2	25 48.682	3.4163	14 34 6.08	2.980
14 934	7.2	25 53.237	3.4233	14 51 11.89	2.974
14 939	8.7	27 4.146	3.4062	14 8 54.81	2.872
15 851	8.3	27 23.925	3.4490	15 52 31.60	2.843
14 947	6.3	28 13.247	3.4086	14 14 7.54	2.772
15 856	7.5	28 16.159	3.4403	15 30 55.18	2.767
14 948	8.6	28 19.582	3.4132	14 25 14.10	2.762
13 922	8.4	28 50.631	3.4013	13 56 5.57	2.717
13 927	8.1	29 27.168	3.3871	13 20 45.12	2.665
13 930	8.4	29 41.636	3.3840	13 13 10.14	2.645
14 958	8.4	30 46.045	3.4179	14 35 36.80	2.551
14 959	8.7	31 0.699	3.4074	14 9 49.50	2.529
14 973	8.0	33 25.926	3.4161	14 29 56.76	2.319
14 978	8¼	34 5.608	3.4222	14 44 35.73	2.263
13 954	8.8	35 50.746	3.3820	13 5 47.80	2.109
13 957	8.6	36 31.234	3.3930	13 32 31.01	2.052
14 991	7.6	37 17.568	3.4076	14 7 49.82	1.983
13 964	8.7	37 23.641	3.3822	13 5 47.92	1.976
14 998	8.7	37 50.213	3.4135	14 21 50.62	1.936
12 880	8½	38 28.320	3.3720	12 40 21.58	1.881
12 882	7.7	39 4.795	3.3647	12 22 18.98	1.828
12 884	7.2	39 23.744	3.3763	12 50 43.57	1.800
13 971	8.5	39 23.787	3.3932	13 31 59.72	1.800
12 896	7½	41 35.195	3.3633	12 18 7.75	1.610
12 899	8.6	41 51.970	3.3613	12 13 14.60	1.585
13 979	6.1	42 2.609	3.4016	13 51 47.32	1.569
12 910	8¼	43 36.247	3.3590	12 7 4.47	1.434
13 988	8.5	43 45.369	3.4024	13 53 21.99	1.421
12 912	5.6	43 55.902	3.3713	12 37 9.78	1.405
12 925	8.6	46 37.672	3.3772	12 51 9.95	1.170
12 927	8.7	46 50.187	3.3638	12 18 20.52	1.151
11 960	8.1	47 37.345	3.3514	11 47 37.43	1.083
12 937	8.4	48 22.150	3.3664	12 24 18.34	1.015
12 941	8½	48 29.144	3.3575	12 2 34.39	1.007
11 964	7.2	48 57.059	3.3503	11 44 38.49	0.966
11 965	8.0	49 1.976	3.3436	11 27 58.90	0.959
12 946	8.6	49 37.976	3.3779	12 52 37.60	0.907
12 950	8	50 0.736	3.3807	12 59 4.19	0.873
11 970	8¾	50 2.961	3.3515	11 47 31.55	0.870
12 963	8.3	52 27.444	3.3780	12 52 13.54	0.660
12 965	8.6	52 44.233	3.3806	12 58 39.64	0.636
12 968	6.7	53 15.676	3.3762	12 47 54.82	0.589
11 986	8.6	53 45.429	3.3500	11 45 14.84	0.547
12 975	8.1	53 50.900	3.3680	12 27 45.50	0.538
12 980	7.8	54 40.084	3.3716	12 36 20.04	0.466
11 995	8.6	54 59.137	3.3564	11 59 2.11	0.439
11 1002	8½	56 29.890	3.3480	11 39 18.18	0.306
12 994	8¼	57 1.546	3.3732	12 40 15.11	0.260
11 1005	8.5	57 9.367	3.3348	11 5 32.64	0.248
11 1007	7.9	57 44.188	3.3359	11 8 13.88	0.198
11 1009	6.2	57 49.920	3.3491	11 40 56.95	0.190
11 1022	8.1	6 0 7.388	3.3380	11 13 34.52	−0.010
11 1032	8	2 3.549	3.3330	11 1 10.81	0.181
11 1038	8.6	2 47.923	3.3425	11 24 37.50	0.245
12 1032	8.9	3 7.323	3.3640	12 17 41.68	0.273

(9) **The Separate Observations.** In the following collection of the individual observations, the Precessions are entered for those which were made in 1901. No proper motions have been applied.

OBSERVATIONS OF EROS STARS, SECOND LIST.

37° 480.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0 ° ′ ″
Nov. 5		2 0 9.204	37 48 54.32
9		9.173	54.23
1900.85		9.189	54.28

38° 413.

Nov. 12		2 2 21.519	38 55 17.51
13		21.463	17.35
1900.87		21.491	17.43

38° 418.

Nov. 5	N.f.	2 2 57.599	39 7 3.82
9		57.625	3.44
1900.85		57.612	3.63

37° 490.

Nov. 12		2 3 56.207	38 11 25.41
13		56.235	25.32
1900.87		56.221	25.36

36° 421.

Nov. 26		2 4 4.074	36 18 58.94
27		4.077	59.24
1900.91		4.076	59.09

36° 426.

Nov. 1		2 4 37.569	37 13 44.47
2		37.568	44.53
1900.84		37.569	44.50

38° 423.

Nov. 23		2 4 41.615	38 13 52.69
Dec. 5		41.589	52.14
1900.91		41.602	52.41

38° 425.

Nov. 28	S.p.	2 4 48.725	38 34 2.81
30		48.710	2.20
1900.91		48.718	2.50

36° 427.

Nov. 5		2 5 25.285	36 52 50.41
9		25.268	51.18
1900.85		25.277	50.80

36° 428.

Nov. 12		2 5 53.512	36 29 45.38
13		53.416	44.93
1900.87		53.464	45.16

38° 434.

Date.	Mag.	R. A. 1900 o. h m s	Decl. 1900.0. ° ′ ″
Nov. 1		2 6 40.568	38 24 58.33
2		40.521	58.22
1900.84		40.544	58.27

36° 435.

Nov. 26		2 6 45.214	36 54 0.90
27		45.252	0.98
1900.91		45.233	0.94

37° 505.

Nov. 9		2 7 52.460	37 56 20.51
28		52.486	20.29
1900.88		52.473	20.40

36° 440.

Nov. 23		2 7 53 525	37 8 58.43
Dec. 5		53.489	58.24
1900.91		53.507	58.33

37° 506.

Nov. 12		2 8 4.498	38 10 15.25
13	8½	4.456	15.28
1900.87		4.477	15.26

37° 512.

Nov. 1	S.f.	2 9 25.398	37 55 1.38
2	8½	25.367	1.63
1900.84		25.382	1.50

36° 446.

Nov. 5		2 9 52.908	36 18 18.66
9		52.921	18.75
1900.85		52.914	18.70

36° 450.

Nov. 12	N.p.	2 10 27.205	36 40 59.52
13		27.209	59.50
1900.87		27.207	59.51

37° 514.

Nov. 26		2 10 54.309	37 40 56.16
27		54.318	56.29
1900.91		54.313	56.22

36° 453.

Nov. 23	S.	2 11 8.257	37 1 11.26
Dec. 5	8½	8.196	10.57
1900.91		8.227	10.91

37° 516.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900 0 ° ′ ″
Nov. 28		2 11 14.762	37 22 7.87
30		14.659	7.42
1900.91		14.710	7.64

37° 518.

Nov. 1	Dup.	2 11 49.124	37 37 27.53
2	8½	49.159	27.52
1900.84		49.141	27.52

36° 458.

Nov. 5		2 12 32.906	36 36 16.37
9		32.951	16.48
1900.85		32.929	16.42

36° 464.

Nov. 1		2 14 57.597	36 36 45.34
2	7½	57.592	44.49
1900.84		37.594	44.91

36° 465.

Nov. 5	N.p.	2 15 9.973	36 57 52.78
9		10.053	53.54
1900.85		10.013	53.16

36° 465.

Nov. 12	S.f.	2 15 10.196	36 57 51.07
13		10.244	50.99
1900.87		10.220	51.03

36° 470.

Nov. 1		2 17 13.145	37 6 15.71
2		13.129	15.28
1900.84		13.137	15.50

36° 473.

Nov. 5		2 17 36.693	36 38 51.37
9		36.727	51.32
1900.85		36.710	51.34

36° 478.

Nov. 12		2 19 9.877	36 39 59.71
13		9.851	59.90
1900.87		9.864	59.80

35° 470.

Nov. 1		2 19 20.792	35 31 8.49
2		20.756	8.32
1900.84		20.774	8.40

34° 432.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Nov. 26		2 19 25.340	34 35 20.93
27		25.291	21.71
1900.91		25.316	21.32

36° 482.

Nov. 5		2 19 44.324	36 33 39.58
9		44.332	39.52
1900.85		44.328	39.55

34° 435.

Nov. 23	8¼	2 20 8.237	34 24 7.26
Dec. 5		8.236	6.70
1900.91		8.237	6.98

34° 437.

Nov. 28		2 20 45.278	35 9 50.40
30		45.251	49.97
1900.91		45.264	50.19

36° 491.

Nov. 12		2 21 8.845	36 31 1.74
13	7¾	8.826	1.54
1900.87		8.836	1.64

35° 477.

Nov. 1		2 22 1.297	35 29 1.55
2		1.271	1.44
1900.84		1.284	1.50

34° 442.

Nov. 5		2 22 26.880	34 51 0.27
9		26.872	0.34
1900.85		26.876	0.30

35° 480.

Nov. 26		2 22 51.163	34 13 12.03
27		51.124	12.03
1900.91		51.143	12.03

35° 490.

Nov. 1		2 24 41.811	35 40 21.18
2		41.785	20.96
1900.84		41.798	21.07

33° 447.

Nov. 5		2 24 57.961	33 54 54.73
9		58.012	54.76
1900.85		57.987	54.74

35° 494.

Nov. 12		2 25 5.070	35 18 45.39
13		5.008	45.11
1900.87		5.039	45.25

34° 448.

Nov. 26		2 25 4.146	34 29 14.35
27		4.198	14.65
1900.91		4.172	14.50

34° 449.

Nov. 23		2 25 6.733	34 57 20.03
Dec. 5		6.742	19.82
1900.91		6.738	19.92

35° 497.

Nov. 28		2 25 59.853	35 42 13.28
30		59.868	13.18
1900.91		59.860	13.23

34° 454.

Nov. 1		2 26 3.407	34 14 9.01
2	7	3.339	9.26
1900.84		3.373	9.13

34° 457.

Nov. 5	8	2 26 29.185	34 50 17.59
9	8¼	29.226	17.49
1900.85		29.206	17.54

33° 454.

Nov. 12		2 26 50.236	34 6 3.26
13	6	50.287	3.11
1900.87		50.261	3.18

34° 462.

Nov. 1		2 28 12.945	34 42 41.27
2		12.874	41.28
1900.84		12.910	41.28

33° 461.

Nov. 26		2 28 12.655	33 21 10.18
27		12.643	11.02
1900.91		12.649	10.60

33° 462.

Nov. 23		2 28 31.030	33 28 32.38
Dec. 5		31.084	32.19
1900.91		31.057	32.29

33° 463.

Nov. 5		2 28 40.275	33 38 41.04
9		40.281	41.20
1900.85		40.278	41.12

34° 469.

Nov. 12	S.p.	2 29 42.572	34 15 5.03
13		42.567	4.29
28		42.556	4.25
1900.88		42.565	4.52

34° 471.

Nov. 30	N.f.	2 29 46.034	34 17 17.45
Dec. 3		45.988	17.93
4		45.970	17.56
1900.92		45.997	17.65

34° 476.

Nov. 1		2 31 44.861	34 43 40.89
2		44.820	40.72
1900.84		44.840	40.80

33° 476.

Nov. 5	N.p.	2 32 30.152	33 56 1.69
9		30.191	1.88
1900.85		30.171	1.79

34° 483.

Nov. 12		2 32 41.160	34 50 21.96
13		41.183	21.83
1900.87		41.171	21.90

32° 478.

Nov. 26	dup. mean.	2 32 43.484	32 59 9.64
27		43.468	9.97
1900.91		43.476	9.80

32° 483.

Nov. 1	S.f.	2 33 45.709	33 3 52.99
2	7½	45.686	52.66
1900.84		45.698	52.82

43° 481.

Dec. 10	dup.	2 33 46.977	33 31 6.08
11	N.f.	47.030	5.76
1900.94		47.003	5.92

32° 484.

Dec. 24	7½	2 33 49.599	32 23 0.93
26		49.591	0.86
1900.98		49.595	0.90

34° 488.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Dec. 28		2 34 . . .	34 51 30.17
31		24.740	30.09
Jan. 18		28.474	45.44
23		28.448	45.06
1901.04		+3.654	+15.67

34° 492.

Jan. 15	S.f.	2 34 55.157	34 24 41.90
16	9	55.228	41.68
1901.04		55.192	41.79

33° 493.

Dec. 10		2 36 31.060	33 20 24.90
11	8½	31.062	24.81
1900.94		31.061	24.86

32° 490.

Dec. 24	N.p.	2 36 38.528	32 28 32.86
26		38.526	31.92
1900.98		38.527	32.39

33° 494.

Dec. 31	8½	2 37 16.730	33 44 51.89
Jan. 18	8½	20.296	45 7.60
23	8½	20.448	7.78
1901.04		+3.639	+15.51

32° 498.

Dec. 10	8¾	2 39 4.242	32 19 51.40
11	8¾	4.308	51.22
1900.94		4.275	51.31

31° 477.

Dec. 24	2 40 19.069	31 34 26.90
26	19.009	27.08
1900.98	19.039	26.99

33° 512.

Dec. 10	8¾	2 41 27.424	33 13 1.41
11		27.439	1.36
1900.94		27.431	1.39

32° 507.

Dec. 28	8	2 43 1.124	32 45 32.56
31		1.147	33.60
1900.99		1.136	33.08

32° 508.

Jan. 15	8	2 43 4.745	32 25 55.42
16		4.727	55.74
1901.04		4.736	55.58
		+3.627	+15.19

31° 483.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Dec. 24		2 43 9.612	31 41 46.64
26		9.482	46.71
1900.98		9.547	46.68

31° 490.

Dec. 10	2 44 23.265	31 33 33.66
11	23.280	32.97
1900.94	23.272	33.31

31° 493.

Dec. 28	7½	2 44 55.976	31 57 0.72
31	7¾	56.040	1.08
1900.99		56.008	0.90

32° 517.

Jan. 15	2 46 0.533	32 20 2.51
16	0.502	2.69
1901.04	0.517	2.60
	+3.633	+15.02

31° 497.

Dec. 10	2 47 21.868	31 14 7.06
11	21.905	7.30
1900.94	21.887	7.18

32° 522.

Dec. 24	8	2 47 34.807	32 30 33.90
26	7¾	34.801	33.71
1900.98		34.804	33.80

31° 500.

Dec. 28	8	2 48 4.357	31 55 42.83
31	8	4.379	43.23
1900.99		4.368	43.03

30° 464.

Dec. 10	2 49 39.339	30 38 14.42
11	39.396	13.82
1900.94	39.368	14.12

30° 465.

Jan. 15	7½	2 49 54.230	31 10 44.76
16		54.239	44.91
1901.04		54.234	44.83
		+3.619	+14.79

30° 466.

Dec. 24	7¾	2 50 30.127	30 28 34.64
26	7½	30.079	34.03
1900.98		30.103	34.33

31° 509.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Dec. 28		2 51 12.979	31 31 53.66
31		12.989	54.11
1900.99		12.984	53.89

30° 469.

Dec. 10	2 51 58.172	31 6 52.77
11	58.151	52.98
1900.94	58.161	52.88

31° 511.

Jan. 15	8½	2 52 9.360	31 37 10.20
16		9.361	9.67
1901.04		9.360	9.93
		+3.634	+14.66

31° 512.

Jan. 18	2 52 16.493	32 3 41.07
23	16.550	41.15
1901.06	16.522	41.11
	+3.644	+14.65

30° 474.

Dec. 10	2 53 52.611	30 12 27.74
11	52.682	27.36
1900.94	52.647	27.55

30° 477.

Dec. 24	2 54 13.505	30 43 39.50
26	13.473	39.64
1900.98	13.489	39.57

29° 508.

Dec. 28	2 54 24.950	30 10 18.07
31	25.033	17.96
1900.99	24.991	18.01

31° 524.

Jan. 15		2 55 14.133	31 33 44.29
16	8¼	14.142	44.62
1901.04		14.138	44.46
		+3.641	+14.48

30° 479.

Dec. 10	9	2 56 6.814	30 35 28.97
11		6.790	28.83
1900.94		6.802	28.90

29° 517.

Dec. 24	2 57 39.220	30 7 7.39
26	39.178	7.28
1900.98	39.199	7.33

30° 482.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Dec. 10		2 58 31.686	30 55 10.10
11		31.681	10.06
1900.94		31.683	10.08

30° 484.

Dec. 28	8½	2 58 51.319	30 38 55.17
31	8½	51.381	56.40
1900.99		51.350	55.79

28° 488.

Jan. 15	2 59 21.932	29 9 23.56
16	21.933	23.71
1901.04	21.932	23.63
	+3.598	+14.22

29° 519.

Jan. 18	2 59 44.685	30 8 30.44
23	8½ 44.741	30.59
1901.06	44.713	30.51
	+3.621	+14.20

29° 522.

Dec. 10	3 0 48.120	30 8 28.85
11	48.085	28.89
1900.94	48.102	28.87

28° 493.

Dec. 24	3 1 16.435	28 44 13.73
26	16.454	13.57
1900.98	16.444	13.65

28° 499.

Dec. 28	3 3 35.652	28 41 42.41
31	35.715	42.77
1900.99	35.683	42.59

30° 494.

Dec. 10	9	3 3 42.956	31 0 59.68
11		42.887	59.44
1900.94		42.921	59.56

29° 531.

Dec. 24	N.f.	3 4 13.752	29 17 5.69
26		13.762	5.58
1900.98		13.757	5.63

29° 534.

Dec. 10	N.p.	3 5 54.315	29 27 14.09
11		54.297	13.97
1900.94		54.306	14.03

30° 503.

Dec. 28		3 6 50.789	30 28 37.24
31		50.798	38.09
1900.99		50.793	37.67

28° 507.

Dec. 24	8	3 7 34.983	28 51 27.21
26	8	34.946	27.16
1900.98		34.964	27.19

27° 488.

Dec. 10	3 11 2.146	28 6 59.39
11	2.202	59.63
1900.94	2.174	59.51

28° 511.

Dec. 24	3 11 1.895	28 23 24.82
26	1.888	24.69
1900.98	1.891	24.76

28° 514.

Dec. 28	8½	3 12 24.834	28 20 49.38
Jan. 28		28.544	21 2.72
1901.03		+3.610	+13.39

27° 492.

Dec. 10	3 13 38.033	27 10 43.07
11	38.083	43.16
1900.94	38.058	43.11

28° 516.

Dec. 24	3 14 17.273	28 41 8.94
26	17.200	9.55
1900.98	17.237	9.24

28° 517.

Jan. 15	8½	3 14 40.653	28 28 10.89
16		40.632	10.62
1901.04		40.643	10.76
		+3.617	+13.25

27° 500.

Dec. 10	3 16 11.604	27 14 54.53
11	11.611	54.27
1900.94	11.608	54.40

27° 501.

Dec. 28	3 16 58.039	27 19 44.44
Jan. 28	17 1.702	57.63
1901.03	+3.596	+13.09

26° 548.

Dec. 24	3 17 6.078	26 32 37.07
26	6.065	37.85
1900.98	6.071	37.46

26° 550.

Dec. 10	3 17 32.507	27 2 43.93
11	32.529	43.78
1900.94	32.518	43.86

28° 526.

Jan. 15	3 18 49.216	28 18 11.05
16	49.168	10.96
1901.04	49.192	11.00
	+3.622	+12.97

28° 532.

Dec. 24	3 20 31.278	28 21 59.29
26	31.318	59.63
1900.98	31.298	59.46

27° 509.

Dec. 10	3 21 36.684	27 24 9.81
11	36.661	9.84
1900.94	36.672	9.82

26° 565.

Nov. 28	3 24 19.702	26 40 47.69
30	19.773	48.11
1900.91	19.737	47.90

27° 513.

Dec. 24	S.p.	3 24 58.301	27 22 55.67
26		58.281	55.95
1900.98		58.291	55.81

26° 566.

Dec. 10	3 25 0.800	26 46 14.03
11	0.875	14.41
1900.94	0.838	14.22

27° 514.

Dec. 3	N.f.	3 25 0.954	27 23 22.94
4		0.945	22.42
1900.92		0.950	22.68

27° 515.

Dec. 28	pr.	3 25 17.645	27 13 49.66
Jan. 28		21.284	14 2.35
1901.03		+3.610	+12.53

27° 515.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Jan. 15		3 25 22.147	27 14 1.68
16		22.117	1.88
1901.04		22.132	1.78
		+3.610	+12.53

27° 519.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Nov. 28	8½	3 26 33.703	28 1 33.86
30		33.696	34.16
1900.91		33.700	34.01

26° 572.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Nov. 28		3 28 57.157	26 16 22.64
30		57.190	22.62
1900.91		57.173	22.63

26° 574.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Dec. 3		3 29 19.246	26 30 58.99
4		19.159	58.84
1900.92		19.202	58.91

27° 525.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Dec. 10	8¾	3 29 20.798	27 11 28.24
11		20.835	28.64
1900.94		20.817	28.44

27° 526.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Dec. 24	8¼	3 29 22.583	27 30 46.42
26	8¼	22.525	46.62
1900.98		22.554	46.52

27° 529.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Dec. 28		3 30 1.591	27 15 36.79
Jan. 28		5.268	48.82
1901.03		+3.619	+12.20

26° 579.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Jan. 15	8¾	3 30 9.658	27 0 52.92
16		9.745	53.04
1901.04		9.701	52.98
		+3.613	+12.20

25° 580.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Nov. 28		3 31 9.959	25 40 3.66
30		9.969	4.05
1900.91		9.964	3.86

26° 590.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Nov. 28		3 33 29.664	26 53 47.03
30		29.743	46.72
1900.91		29.703	46.88

25° 584.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Dec. 3		3 33 29.114	25 48 4.80
4		29.104	4.75
1900.92		29.109	4.78

26° 596.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Dec. 10		3 34 11.983	26 33 45.23
11		11.993	45.79
1900.94		11.988	45.51

24° 533.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Jan. 18		3 35 23.849	24 41 17.26
23		23.809	17.37
1901.06		23.829	17.31
		+3.569	+11.83

24° 534.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Nov. 28		3 35 42.884	25 2 54.66
30		42.906	55.24
1900.91		42.895	54.95

26° 601.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Dec. 3		3 36 27.698	26 15 11.39
4		27.656	11.08
1900.92		27.677	11.23

25° 593.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Dec. 10	7½	3 37 7.267	25 21 45.28
11	7½	7.239	45.18
1900.94		7.253	45.23

25° 598.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Nov. 28		3 37 38.696	25 48 29.14
30		38.691	29.22
1900.91		38.693	29.18

25° 597.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Dec. 28	8½	3 37 38.908	25 27 8.09
Jan. 28	8½	42.578	21.95
29		42.536	21.09
1901.05		+3.590	+11.67

24° 537.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Dec. 3		3 37 44.822	24 45 51.16
4		44.716	51.18
1900.92		44.769	51.17

25° 599.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Jan. 15		3 37 48.411	26 3 59.62
16		48.487	60.16
1901.04		48.449	59.89
		+3.605	+11.66

25° 600.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Dec. 24	8½	3 37 52.818	25 24 36.45
26	8½	52.812	37.04
1900.98		52.815	36.74

24° 546.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Dec. 10		3 39 11.660	24 31 31.96
11		11.606	31.96
1900.94		11.633	31.96

26° 608.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Jan. 23		3 39 15.755	26 34 50.83
25		15.697	50.45
1901.06		15.726	50.64
		+3.619	+11.56

24° 547.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Nov. 28		3 39 15.282	24 9 13.23
30		15.281	12.90
1900.91		15.281	13.07

25° 607.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Dec. 28		3 39 32.984	25 17 50.74
Jan. 28		36.648	62.74
1901.03		+3.590	+11.53

24° 553.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Dec. 3	N.p.	3 39 56.938	24 14 32.34
4		56.925	33.08
1900.92		56.931	32.71

25° 611.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Jan. 15		3 40 1.907	25 45 59.65
16		1.915	59.51
1901.04		1.911	59.58
		+3.601	+11.50

24° 562.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Dec. 10		3 41 1.769	24 12 36.36
11		1.813	36.40
1900.94		1.791	36.38

24° 568.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Nov. 28	8½	3 41 47.079	25 4 38.04
30	8½	47.086	38.58
1900.91		47.082	38.31

24° 571.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Dec. 3		3 42 8.032	24 40 48.66
4		7.982	48.78
1900.92		8.007	48.72

26° 617.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Dec. 24		3 42 16.542	26 16 49.71
26		16.569	50.48
1900.98		16.556	50.10

25° 620.

Dec. 28		3 42 41.120	25 29 34.35
Jan. 28		44.816	45.93
1901.03		+3.599	+11.31

23° 561.

Dec. 10	S.f.	3 43 24.131	24 4 31.77
11		24.124	32.39
1900.94		24.128	32.08

23° 562.

Jan. 15		3 43 32.225	23 56 44.22
16		32.247	44.20
1901.04		32.236	44.21
		+3.564	+11.25

25° 624.

Nov. 28		3 44 18.133	25 16 40.38
30		18.076	40.43
1900.91		18.104	40.40

24° 578.

Dec. 3		3 44 29.971	24 11 30.57
4		29.921	30.39
1900.92		29.946	30.48

23° 570.

Jan. 18		3 44 59.089	23 39 44.27
23		59.057	44.60
1901.05		59.073	44.43
		+3.560	+11.15

25° 627.

Dec. 24		3 45 17.309	26 3 6.31
26		17.251	7.47
1900.98		17.280	6.89

24° 583.

Dec. 10	7½	3 45 25.780	24 51 39.01
11		25.687	38.93
1900.94		25.733	38.97

25° 631.

Nov. 28		3 45 55.565	25 41 56.24
30		55.571	56.31
1900.91		55.568	56.28

24° 587.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Dec. 3		3 46 12.504	24 52 0.80
4		12.512	0.44
1900.92		12.508	0.62

24° 589.

Dec. 28		3 46 54.529	24 25 3.26
Jan. 28		58.241	14.44
1901.03		+3.580	+11.00

25° 637.

Jan. 15		3 47 10.244	25 14 23.11
16		10.240	23.33
1901.04		10.242	23.22
		+3.600	+10.99

25° 639.

Dec. 10		3 47 28.196	25 38 16.34
11		28.184	16.66
1900.94		28.190	16.50

25° 641.

Jan. 18		3 47 36.694	25 23 19.61
23		36.658	19.86
1901.06		36.676	19.74
		+3.604	+10.96

23° 584.

Nov. 28		3 49 4.522	23 39 46.62
30		4.561	46.26
1900.91		4.541	46.44

24° 595.

Dec. 3		3 49 7.612	24 48 41.19
4		7.555	41.10
1900.92		7.583	41.14

23° 586.

Dec. 10		3 49 50.843	23 32 9.08
11		50.847	8.86
1900.94		50.845	8.97

23° 589.

Dec. 24	8¼	3 50 40.789	23 18 14.06
26	8¼	40.746	14.94
1900.98		40.768	14.50

24° 598.

Nov. 28		3 51 10.996	24 59 31.63
30		11.057	31.43
1900.91		11.027	31.53

24° 599.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Dec. 3		3 51 27.600	24 10 19.64
4		27.579	
1900.92		27.590	

23° 594.

Dec. 10	7½	3 52 22.741	23 47 40.34
11		22.762	39.17
1900.94		22.751	39.76

23° 600.

Dec. 28		3 53 6.442	23 20 30.39
Jan. 28		9.982	40.16
1901.03		+3.563	+10.54

24° 602.

Nov. 28		3 53 13.178	24 55 47.21
30		13.133	47.55
1900.91		13.156	47.38

24° 605.

Dec. 3		3 53 54.454	24 24 43.11
4		54.454	42.55
1900.92		54.454	42.83

22° 612.

Dec. 24		3 53 57.335	22 55 59.89
26		57.256	56 1.18
1900.98		57.296	56 0.53

22° 613.

Dec. 10		3 54 11.398	23 6 55.95
11		11.423	55.82
1900.94		11.410	55.89

22° 615.

Jan. 15		3 54 38.463	22 32 39.04
16	8¾	38.452	39.09
1901.04		38.457	39.06
		+3.546	+10.43

22° 617.

Nov. 28	S.p.	7½	3 55 0.403	22 55 11.52
30		7½	0.376	12.12
1900.91			0.390	11.82

22° 617.

Jan. 18	S.f.		3 55 4.411	22 55 16.50
23		8½	4.399	17.03
1901.06			4.405	16.76
			+3.556	+10.40

23° 606.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Dec. 3		3 57 48.914	24 7 32.08
4	8½	48.906	32.09
1900.92		48.910	32.09

23° 609.

Nov. 28		3 58 22.731	23 49 51.04
30		22.813	50.73
1900.91		22.772	50.88

23° 611.

Dec. 10		3 58 52.474	23 14 5.56
11		52.417	4.91
1900.94		52.446	5.23

23° 613.

Dec. 28		3 59 17.096	23 31 26.12
Jan. 28		20.741	36.23
1901.03		+3.576	+10.08

22° 629.

Jan. 15		3 59 30.808	22 53 54.98
16		30.875	54.60
1901.04		30.841	54.79
		+3.561	+10.07

23° 617.

Jan. 18		4 0 43.151	23 15 0.74
23		43.109	1.76
1901.06		43.130	1.25
		+3.571	+9.98

21° 593.

Dec. 24		4 2 20.157	21 45 15.10
26		20.149	15.88
1900.98		20.153	15.49

23° 624.

Dec. 10		4 2 52.509	23 36 19.22
11		52.458	19.19
1900.94		52.483	19.20

22° 637.

Dec. 28	S.	4 2 56.275	22 49 55.18
Jan. 28		59.901	64.49
1901.03		+3.564	+9.80

22° 637.

Jan. 15	N.	4 2 59.899	22 50 9.91
16		59.912	9.98
1901.04		59.906	9.94
		+3.564	+9.80

23° 632.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Jan. 25		4 4 21.158	23 43 15.35
29		21.077	14.80
1901.07		21.117	15.08
		+3.587	+9.70

21° 601.

Dec. 10		4 5 14.193	21 37 27.07
11		14.202	27.35
1900.94		14.198	27.21

23° 642.

Dec. 24		4 6 26.543	23 19 0.21
26		26.485	1.45
1900.98		26.514	0.83

23° 645.

Dec. 28		4 6 48.026	23 15 48.44
Jan. 28		51.634	58.43
1901.03		+3.579	+9.51

22° 649.

Jan. 15		4 6 58.953	22 9 32.61
16		58.930	32.40
1901.04		58.942	32.50
		+3.552	+9.50

22° 654.

Dec. 10	8¼	4 8 2.357	22 27 10.97
11	8¼	2.249	10.93
1900.94		2.303	10.95

22° 657.

Jan. 23		4 8 37.179	22 12 5.66
25		37.261	5.14
1901.06		37.220	5.40
		+3.555	+9.37

23° 650.

Dec. 24		4 8 34.745	23 7 25.15
26		34.672	25.39
1900.98		34.709	25.27

21° 610.

Dec. 28		4 9 17.874	21 50 42.15
Jan. 28		21.432	50.74
1901.03		+3.547	+9.31

22° 663.

Dec. 10		4 10 3.553	22 43 0.97
11		3.587	0.93
1900.94		3.570	0.95

21° 612.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Jan. 15		4 10 41.268	21 39 41.59
16		41.203	41.85
1901.04		41.236	41.72
		+3.544	+9.21

22° 665.

Jan. 23		4 10 56.460	23 5 36.53
25		56.508	35.90
1901.06		56.484	36.21
		+3.579	+9.19

21° 617.

Dec. 24		4 11 55.003	22 6 28.51
26		55.007	28.43
1900.98		55.005	28.47

21° 618.

Dec. 10		4 12 28.139	21 20 5.57
11		28.066	5.41
1900.94		28.102	5.49

20° 731.

Dec. 28		4 13 7.074	21 3 23.01
Jan. 28		10.680	32.13
29		10.692	31.64
1901.05		+3.532	+9.02

20° 733.

Jan. 15		4 13 35.893	20 54 10.27
16		35.913	10.70
1901.04		35.903	10.48
		+3.529	+8.98

21° 623.

Jan. 23		4 13 45.004	21 32 3.54
25		44.979	3.54
1901.06		44.991	3.54
		+3.544	+8.97

20° 740.

Dec. 10		4 15 37.536	20 48 8.09
11		37.476	8.59
1900.94		37.506	8.34

20° 741.

Dec. 24		4 15 41.397	20 56 57.87
26		41.371	59.18
1900.98		41.384	58.52

20° 744.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Dec. 28		4 16 29.718	20 35 4.66
Jan. 28		33.301	15.46
29		33.297	14.19
1901.05		+3.524	+8.75

21° 635.

Jan. 23		4 17 30.752	21 8 53.56
25		30.808	52.39
1901.06		30.780	52.98
		+3.539	+8.68

20° 751.

Dec. 10		4 17 38.781	20 44 56.07
11		38.774	56.45
1900.94		38.777	56.26

21° 639.

Jan. 15		4 18 9.583	21 18 37.25
16		9.590	37.02
1901.04		9.586	37.13
		+3.543	+8.62

21° 641.

Dec. 28		4 18 18.274	21 30 17.35
Jan. 28		21.897	26.77
1901.03		+3.548	+8.61

21° 642.

Dec. 24		4 19 24.462	22 3 53.79
26		24.479	53.99
1900.98		24.470	53.89

21° 643.

Dec. 10		4 19 27.575	21 58 16.50
11		27.521	16.71
1900.94		27.548	16.60

20° 754.

Jan. 15	8½	4 19 57.113	20 54 39.03
16		57.063	38.14
1901.04		57.088	38.58
		+3.535	+8.48

21° 644.

Jan. 23		4 20 26.406	21 14 44.50
25		26.390	44.79
1901.06		26.398	44.64
		+3.544	+8.44

20° 756.

Dec. 28		4 21 13.463	20 45 58.12
Jan. 28		17.005	66.66
1901.03		+3.533	+8.38

21° 647.

Dec. 10		4 22 4.596	21 23 49.16
11		4.613	49.05
1900.94		4.604	49.10

20° 760.

Dec. 24		4 22 44.327	20 36 35.03
26		44.238	35.74
1900.98		44.282	35.39

19° 727.

Jan. 15		4 22 49.103	19 31 16.44
16		49.064	16.85
1901.04		49.084	16.65
		+3.505	+8.26

20° 761.

Jan. 23	8	4 22 52.443	20 27 26.79
25		52.436	26.21
1901.06		52.440	26.50
		+3.527	+8.25

19° 731.

Dec. 10		4 24 25.963	19 37 20.45
11		25.939	20.63
1900.94		25.951	20.54

19° 733.

Dec. 28		4 25 22.808	19 55 2.47
Jan. 28		26.381	10.55
1901.03		+3.516	+8.05

20° 772.

Dec. 24		4 25 45.625	20 34 3.27
26		45.615	4.10
1900.98		45.620	3.69

21° 657.

Jan. 15	7½	4 26 15.580	21 25 10.87
16	7¼	15.585	10.62
1901.04		15.582	10.74
		+3.554	+7.98

19° 735.

Dec. 10		4 27 10.375	19 8 10.50
11		10.371	10.65
1900.94		10.373	10.58

19° 736.

Jan. 23		4 27 35.247	19 36 14.98
25		35.300	14.54
1901.06		35.273	14.76
		+3.511	+7.87

20° 778.

Dec. 24	S.f.	4 28 51.814	20 53 43.14
26		51.789	43.69
1900.98		51.801	43.41

19° 740.

Dec. 10		4 29 47.985	19 45 47.32
11		47.957	47.66
1900.94		47.971	47.49

19° 742.

Dec. 28		4 29 50.801	19 40 30.92
Jan. 28		54.314	38.90
1901.03		+3.514	+7.69

19° 744.

Jan. 15		4 30 46.617	19 33 25.74
16		46.649	25.58
1901.04		46.633	25.66
		+3.512	+7.62

19° 745.

Jan. 23	mean dup.	4 30 54.803	19 17 29.89
25		54.921	29.46
1901.06		54.862	29.67
		+3.506	+7.60

20° 785.

Dec. 10		4 32 21.852	20 29 1.49
11		21.862	1.43
1900.94		21.857	1.46

18° 666.

Dec. 24		4 32 41.746	18 31 59.79
26		41.765	32 0.52
1900.98		41.756	32 0.16

19° 755.

Dec. 24	S.f.	4 35 42.535	20 4 12.68
26		42.474	14.01
1900.98		42.504	13.34

19° 759.

Jan. 23		4 35 54.815	19 53 51.68
25		54.804	51.21
1901.06		54.810	51.44
		+3.524	+7.20

18° 684.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Jan. 15		4 37 4.849	18 32 3.48
16		4.890	3.77
1901.04		4.870	3.62
		+3.492	+7.10

19° 774.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Dec. 10	8½	4 39 43.437	19 8 37.98
11		43.340	38.00
1900.94		43.389	37.99

18° 717.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Jan. 23		4 40 18.576	18 37 10.11
25		18.587	10.22
29		18.606	9.18
1901.07		18.590	9.84
		+3.496	+6.84

18° 719.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Dec. 28		4 40 26.444	18 33 13.49
Jan. 28		29.956	20.72
1901.03		+3.495	+6.82

19° 777.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Jan. 15		4 40 47.652	19 18 50.85
16		47.642	50.62
1901.04		47.647	50.73
		+3.513	+6.80

18° 725.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Dec. 24		4 41 4.029	18 53 56.12
26		3.932	56.99
1900.98		3.980	56.56

18° 727.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Dec. 10		4 41 17.867	18 18 27.26
11		17.848	27.70
1900.94		17.858	27.48

19° 782.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Jan. 23		4 41 54.903	19 8 29.10
25		54.912	28.59
1901.06		54.907	28.84
		+3.510	+6.71

17° 789.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Dec. 28		4 42 47.572	17 37 48.89
Jan. 28		51.066	56.07
1901.03		+3.474	+6.63

18° 734.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Dec. 24		4 42 50.790	18 32 33.66
26		50.772	34.13
1900.98		50.781	33.90

18° 738.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Dec. 10	8¾	4 44 27.424	19 1 10.73
12		27.346	10.42
1900.94		27.385	10.58

17° 791.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Jan. 15		4 44 35.609	17 21 0.42
16		35.617	0.02
1901.04		35.613	0.22
		+3.468	+6.48

18° 743.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Dec. 28		4 45 31.436	18 40 11.00
Jan. 28		34.936	17.27
1901.03		+3.501	+6.40

17° 797.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Dec. 24		4 46 3.361	17 31 16.62
26		3.290	17.25
1900.98		3.326	16.93

17° 800.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Jan. 23		4 46 18.460	17 22 . . .
1901.06		+3.469	

18° 747.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Jan. 15		4 47 47.862	18 54 31.10
16		47.865	31.32
1901.04		47.864	31.21
		+3.508	+6.22

19° 811.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Dec. 10		4 49 5.687	19 19 23.92
11		5.623	24.59
1900.94		5.655	24.26

18° 754.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Dec. 24		4 49 19.989	18 16 48.34
26		19.953	48.78
1900.98		19.971	48.56

17° 814.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Dec. 28	8¾	4 50 41.306	17 50 44.01
Jan. 28		44.816	49.68
1901.03		+3.484	+5.97

16° 671.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Dec. 10	7	4 51 1.916	16 34 36.07
11		1.855	35.94
1900.94		1.886	36.00

16° 672.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Jan. 15		4 51 39.247	16 59 54.14
16		39.219	54.21
1901.04		39.233	54.17
		+3.463	+5.90

18° 765.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Dec. 24		4 52 30.116	18 50 19.61
26		30.201	19.61
1900.98		30.159	19.61

16° 679.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Dec. 10		4 54 6.968	16 40 41.28
11		6.931	41.45
1900.94		6.950	41.37

16° 685.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Dec. 28		4 56 8.514	16 41 13.90
Jan. 28		11.993	18.11
29		11.983	17.39
1901.05		+3.458	+5.52

16° 688.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Jan. 15		4 58 21.321	16 59 10.66
16		21.351	10.53
1901.04		21.336	10.60
		+3.466	+5.33

18° 777.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Jan. 23		4 59 3.800	18 6 58.26
25		3.898	58.38
1901.06		3.849	58.32
		+3.495	+5.27

17° 841.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Dec. 10		5 0 28.833	17 40 51.88
12		28.860	51.77
1900.94		28.847	51.82

16° 697.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Dec. 24		5 1 14.754	16 41 39.91
26		14.685	40.12
1900.98		14.720	40.01

16° 700.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Dec. 28		5 2 11.385	16 50 52.69
Jan. 28		14.826	57.60
1901.03		+3.465	+5.01

15° 749.

Dec. 10		5 2 21.680	15 43 25.01
12		21.693	24.49
1900.94		21.687	24.75

15° 752.

Jan. 15		5 4 1.948	15 28 14.67
16		1.858	15.30
1901.04		1.903	14.98
		+3.432	+4.85

17° 862.

Jan. 23		5 4 55.338	17 18 57.69
25		55.461	56.85
1901.06		55.400	57.27
		+3.478	+4.78

16° 715.

Dec. 10		5 5 4.394	16 18 32.70
12		4.417	32.62
1900.94		4.406	32.66

15° 759.

Dec. 26		5 5 56.911	15 55 20.03
28		56.884	18.43
Jan. 28		60.253	24.50
1901.02		+3.443	+4.68

16° 721.

Jan. 15		5 6 9.924	16 37 15.19
16		9.874	15.31
1901.04		9.899	15.25
		+3.461	+4.67

17° 867.

Dec. 10	8¾	5 6 24.148	17 8 26.56
12	8¾	24.168	25.92
1900.94		24.158	26.24

17° 869.

Jan. 23	8¼	5 6 45.843	17 5 36.31
25		46.017	35.53
1901.06		45.930	35.92
		+3.473	+4.62

16° 732.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Dec. 28		5 7 28.416	16 45 52.65
Jan. 28		31.847	57.52
1901.03		+3.465	+4.56

16° 735.

Dec. 10		5 8 33.944	16 33 41.54
12		33.919	41.45
1900.94		33.931	41.50

15° 769.

Dec. 24		5 9 42.140	15 30 56.24
26		42.116	56.74
1900.98		42.128	56.49

16° 741.

Dec. 10		5 10 55.273	16 54 31.11
12		55.296	31.11
1900.94		55.284	31.11

16° 742.

Dec. 28		5 11 20.047	16 14 29.82
Jan. 28		23.513	34.45
1901.03		+3.453	+4.23

15° 779.

Jan. 15		5 11 28.428	15 9 17.68
16	8½	28.428	17.53
1901.04		28.428	17.60
		+3.427	+4.22

15° 787.

Dec. 10		5 13 54.874	15 40 53.76
12		54.805	53.48
1900.94		54.840	53.62

15° 789.

Dec. 24		5 14 18.590	16 1 6.93
26		18.563	7.23
1900.98		18.577	7.08

14° 881.

Dec. 28		5 14 53.256	14 57 26.44
Jan. 28		56.663	30.63
1901.03		+3.423	+3.92

15° 790.

Jan. 15		5 15 2.778	15 32 11.04
16		2.797	10.87
1901.04		2.787	10.95
		+3.437	+3.91

15° 795.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Dec. 10		5 15 54.879	15 44 55.40
12		54.867	54.89
1900.94		54.873	55.14

15° 797.

Dec. 24	S.p.	5 16 14.860	15 59 37.64
26	8½	14.855	38.67
1900.98		14.858	38.16

15° 799.

Jan. 23	7½	5 16 41.672	16 1 37.43
25	N.f.	41.740	37.54
1901.06		41.706	37.48
		+3.450	+3.77

15° 805.

Dec. 10	S.f.	5 17 46.708	15 56 43.57
12		46.736	43.43
1900.94		46.722	43.50

15° 809.

Dec. 28		5 19 22.149	15 16 14.62
Jan. 28		25.744	18.23
1901.03		+3.432	+3.54

15° 810.

Dec. 10		5 19 54.078	15 29 26.93
12		54.027	27.22
1900.94		54.052	27.08

15° 813.

Jan. 15		5 20 14.167	15 21 55.81
16		14.127	55.93
1901.04		14.147	55.87
		+3.434	+3.47

15° 814.

Jan. 23		5 20 21.982	15 35 1.83
25		22.115	1.34
1901.06		22.048	1.58
		+3.440	+3.46

15° 822.

Dec. 24		5 21 30.771	15 10 17.37
26		30.671	17.24
1900.98		30.721	17.30

14° 914.

Dec. 10		5 21 59.653	14 3 2.01
12		59.572	1.67
1900.94		59.612	1.84

15° 826.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Dec. 28		5 22 0.856	15 47 22.50
Jan. 28		4.328	25.95
1901.03		+3.446	+3.31

14° 917.

Jan. 15	S.	5 22 13.232	14 55 52.42
16		13.188	52.20
1901.04		13.210	52.31
		+3.424	+3.30

15° 837.

Dec. 10	5 24 42.786	15 16 58.58
12	42.758	58.82
1900.94	42.772	58.70

14° 933.

Dec. 24	5 25 48.729	14 34 5.39
26	48.635	6.76
1900.98	48.682	6.08

14° 934.

Dec. 28	5 25 53.24	14 51 11.60
Jan. 23	56.649	. . .
28	56.669	15.14
1901.05	+3.423	+2.97

14° 939.

Jan. 15	5 27 7.549	14 8 57.62
16	7.555	57.74
1901.04	7.552	57.68
	+3.406	+2.87

15° 851.

Dec. 10	5 27 23.925	15 52 31.55
12	23.925	31.66
1900.94	23.925	31.60

14° 947.

Jan. 23	5 28 16.63	14 14 11.11
25	16.663	9.51
29	16.675	10.32
1901.07	16.656	10.31
	+3.409	+2.77

15° 856.

Dec. 24	5 28 16.150	15 30 54.97
26	16.167	55.38
1900.98	16.159	55.18

14° 948.

Dec. 28	5 28 19.572	14 25 13.90
Jan. 28	23.005	17.06
1901.03	+3.413	+2.76

13° 922.

Dec. 10	dup.	5 28 50.618	13 56 5.63
12	S.p.	50.644	5.51
1900.94		50.631	5 57

13° 927.

Jan. 15	5 29 30.551	13 20 47.19
16	30.559	48.39
1901.04	30.555	47.79
	+3.387	+2.67

13° 930.

Jan. 23	5 29 44.981	13 13 13.46
25	45.058	12.11
1901.06	45.020	12.78
	+3.384	+2.64

14° 958.

Dec. 24	5 30 46.069	14 35 36.55
26	46.021	37.06
1900.98	46.045	36.80

14° 959.

Dec. 10	5 31 0.712	14 9 49.69
12	0.685	49.32
1900.94	0.699	49.50

14° 973.

Dec. 10	5 33 25.936	14 29 56.86
12	25.916	56.65
1900.94	25.926	56.76

14° 978.

Jan. 23	8¼	5 34 9.010	14 44 38.48
25		9.051	37.50
1901.06		9.030	37.99
		+3.422	+2.26

13° 954.

Dec. 28	5 35 50.735	13 5 47.51
Jan. 28	54.139	50.20
1901.03	+3.382	+2.11

13° 957.

Dec. 10	5 36 31.278	13 22 30.70
12	31.191	31.33
1900.94	31.234	31.01

14° 991.

Dec. 24	5 37 17.600	14 7 49.73
26	17.536	49.92
1900.98	17.568	49.82

13° 964.

Jan. 15	5 37 27.047	13 5 50.02
16	26.999	49.77
1901.04	27.023	49.90
	+3.382	+1.98

14° 998.

Jan. 23	5 37 53.556	14 21 53.18
25	53.697	51.93
1901.06	53.626	52.56
	+3.413	+1.94

12° 880.

Dec. 10	8½	5 38 28.342	12 40 21.61
12	8½	28.299	21.56
1900.94		28.320	21.58

12° 882.

Dec. 28	5 39 4.778	12 22 19.07
Jan. 28	8.177	20.73
1901.03	+3.365	+1.83

13° 971.

Dec. 24	5 39 23.749	13 31 60.01
26	23.826	59.44
1900.98	23.787	59.72

12° 884.

Jan. 15	5 39 27.147	12 50 45.64
16	27.092	45.10
1901.04	27.120	45.37
	+3.376	+1.80

12° 896.

Dec. 10		5 41 35.224	12 18 7.95
12	7½	35.166	7.55
1900.94		35.195	7.75

12° 899.

Jan. 23	S.f.	5 41 55.259	12 13 16.68
25		55.403	15.69
1901.06		55.331	16.18
		+3.361	+1.58

13° 979.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Dec. 28		5 42 2.604	13 51 47.34
Jan. 28		6.015	48.88
1901.03		+3.402	+1.57

12° 910.

Dec. 10	8¼	5 43 36.218	12 7 4.34
12		36.275	4.60
1900.94		36.247	4.47

13° 988.

Dec. 24		5 43 45.381	13 53 21.83
26		45.356	22.14
1900.98		45.369	21.99

12° 912.

Jan. 15		5 43 59.283	12 37 11.39
16		59.263	10.97
1901.04		59.273	11.18
		+3.371	+1.40

12° 925.

Dec. 28		5 46 37.682	12 51 9.75
Jan. 28		41.039	11.32
1901.03		+3.377	+1.17

12° 927.

Dec. 10		5 46 50.167	12 18 20.57
12		50.207	20.47
1900.94		50.187	20.52

11° 960.

Dec. 24		5 47 37.365	11 47 37.19
26		37.325	37.67
1900.98		37.345	37.43

12° 937.

Jan. 15		5 48 25.512	12 24 19.56
16		25.520	19.17
1901.04		25.516	19.36
		+3.366	+1.02

12° 941.

Jan. 23	8½	5 48 32.469	12 2 35.37
25		32.535	35.44
1901.06		32.502	35.40
		+3.358	+1.01

11° 964.

Dec. 10		5 48 57.058	11 44 38.93
12		57.059	38.05
1900.94		57.059	38.49

11° 965.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Dec. 28		5 49 2.022	11 27 58.93
Jan. 28		5.273	59.84
1901.03		+3.344	+0.96

12° 946.

Dec. 24		5 49 38.019	12 52 37.57
26		37.933	37.63
1900.98		37.976	37.60

12° 950.

Jan. 15	8	5 50 4.088	12 59 4.92
16	8	4.147	5.20
1901.04		4.117	5.06
		+3.381	+0.87

11° 970.

Dec. 10	8¾	5 50 2.955	11 47 31.59
12	8¾	2.967	31.51
1900.94		2.961	31.55

12° 963.

Dec. 10		5 52 27.455	12 52 13.68
12		27.434	13.41
1900.94		27.444	13.54

12° 965.

Dec. 28		5 52 44.175	12 58 39.98
Jan. 28		47.673	39.95
1901.03		+3.381	+0.64

12° 968.

Dec. 24		5 53 15.715	12 47 54.61
26		15.636	55.04
1900.98		15.676	54.82

11° 986.

Jan. 15		5 53 48.809	11 45 15.42
16		48.749	15.37
1901.04		48.779	15.39
		+3.350	+0.55

12° 975.

Dec. 10		5 53 50.900	12 27 46.00
12		50.901	45.01
1900.94		50.900	45.50

12° 980.

Jan. 23		5 54 43.357	12 36 20.15
25		43.555	20.87
1901.06		43.456	20.51
		+3.372	+0.47

11° 995.

Date.	Mag.	R. A. 1900.0. h m s	Decl. 1900.0. ° ′ ″
Dec. 28		5 54 59.096	11 59 2.15
Jan. 28		62.534	2.51
1901.03		+3.356	+0.44

11° 1002.

Dec. 10	8½	5 56 29.880	11 39 18.23
12		29.901	18.13
1900.94		29.890	18.18

12° 994.

Dec. 24	8¼	5 57 1.557	12 40 14.62
26		1.534	15.60
1900.98		1.546	15.11

11° 1005.

Jan. 15		5 57 12.743	11 5 33.29
16		12.662	32.49
1901.04		12.702	32.89
		+3.335	+0.25

11° 1007.

Jan. 23		5 57 47.455	11 8 14.50
25		47.593	13.66
1901.06		47.524	14.08
		+3.336	+0.20

11° 1009.

Dec. 10		5 57 49.924	11 40 56.75
12		49.915	57.15
1900.94		49.920	56.95

11° 1022.

Dec. 24		6 0 7.405	11 13 34.39
26		7.371	34.65
1900.98		7.388	34.52

11° 1032.

Dec. 28	8	6 2 3.578	11 1 10.30
Jan. 28		6.852	11.15
1901.03		+3.333	−0.18

11° 1038.

Jan. 23		6 2 51.157	11 24 36.73
25		51.373	37.78
1901.06		51.265	37.26
		+3.342	−0.24

12° 1032.

Dec. 24		6 3 7.297	12 17 41.80
26		7.350	41.55
1900.98		7.323	41.68

MISCELLANEOUS OBSERVATIONS.

There are collected here, the determinations of comparison stars, made during the years 1897 to 1901, inclusive, for the use of other observers. The object with which the star was compared, and the name of the observer, are given in the notes. The entire list of 49 stars has finally been reduced to 1900.0 and tabulated, with the Precessions.

Following the comparison stars, there is a list of 20 Proper Motion stars, which were observed during the progress of the PIAZZI list, for Prof. J. G. PORTER, of the Cincinnati Observatory. The majority of these stars are contained in the PIAZZI Catalogue, but the list is collected here for convenience. The correction to the POULKOVA Refractions has been applied, in the reduction of these Declinations.

The Meridian Circle observations of Eros, Nova Persei, and of two comets, close the series of miscellaneous observations.

COMPARISON STARS.

Star.	Obs. Mag.	Epoch.	R. A. 1897.0. h m s	Decl. 1897.0. ° ′ ″	No.	Object.	Observer.
B. D. 65° 212	9¼	1897.77	1 46 52.070	+66 3 14.20	2 2	Comet III, 1896.	R. G. Aitken.
60 519	8½	97.82	2 28 2.585	60 45 47.45	2 2	"	"
B. D. 70	8½	1897.82	1 59 32.83	+78 27 58.1	1 1	Comet *b* 1897.	W. J. Hussey.
74	9¼	97.82	2 5 19.16	78 14 18.4	1 1	"	"
84	7½	97.84	2 22 11.68	77 12 20.4	1 1	"	"
			R. A. 1898.0. h m s	Decl. 1898.0. ° ′ ″			
C. D. 11525 Z.	8½	1898.46	16 24 21.16	−25 14 47.2	1 1	Comet *c* 1898.	W. J. Hussey.
S. D. 4227 B.	8¼	1898.50	15 50 5.61	−21 13 33.9	1 1	Extra stars.	Zod. List.
4748 B.	(8.3)	98.44	17 16 38.91	−20 7 34.7	1 1	"	"
B. D. 4995 K.	8¼	1898.61	22 58 1.15	+39 20 37.0	2 1	Comet *b* 1898.	A. O. Leuschner.
4998	8¾	98.61	22 59 46.11	39 23 53.06	2 2	"	"
S. D. 5294 W. Z.	8½	1898.65	19 53 10.51	−22 11 53.9	1 1	Comet *g* 1898.	W. J. Hussey.
Lam. 2665	7	1898.59	21 24 15.493	+11 30 31.71	2 2	Cluster N. G. C.	
B. D. 4575 K.	8¾	98.60	21 24 37.903	11 14 38.50	2 2	7078.	
4576	8½	98.61	21 24 45.775	12 0 13.58	2 2	Observed	F. P. Leavenworth.
4578 K.	7¼	98.62	21 25 13.602	11 49 38.95	2 2	Circle E. and W.	
4583 K.	6½	98.61	21 26 13.009	11 41 20.89	2 2		
S. D. 5558 K.	7¼	1898.76	20 35 59.56	− 6 21 38.7	1 1	Asteroid D. Q.	E. E. Barnard.
5567 L.	8¼	98.78	20 38 29.07	− 6 19 16.2	1 1	"	"
5588 M.	8	98.76	20 42 45.88	− 6 23 52.2	1 1	"	"
5589 M.	9¼	98.78	20 43 18.61	− 6 18 45.7	1 1	"	"
5596	9½	98.76	20 44 11.88	− 6 20 26.6	1 1	"	"
B. D. 1204	9¼	1898.94	6 24 9.660	+51 17 45.05	3 3	Comet *b* 1898.	C. D. Perrine.
1320	9	98.94	6 28 18.033	50 29 48.98	3 3	"	"
1337	9½	98.94	6 34 8.730	50 43 22.9	2 1	"	"
1338	9¼	98.94	6 34 11.620	50 43 33.7	2 1	"	"
1340 B.	9	98.94	6 34 35.357	50 43 18.8	3 1	"	"

Star.	Obs. Mag.	Epoch.	R. A. 1899.0.	Decl. 1899.0.	No.	Object.	Observer.
			h m s	° ′ ″			
η Virg.	(3.3)	1899.28	12 14 44.272	− 0 6 19.96	6 6	Heliometer meas.	Dr. Schur.
B. D. +0° 2944 K. .	7½	99.28	12 21 35.743	+ 0 22 32.78	3 3	"	"
−1 2670 K. .	7½	99.28	12 22 35.900	− 1 49 18.29	3 3	"	"
−0 2587 K. .	7¾	99.28	12 26 53.773	− 1 12 57.22	3 3	"	"
−0 2590 K. .	7	99.28	12 29 12.553	− 0 51 3.70	3 3	"	"
−1 2699 K. .	7½	99.28	12 31 54.670	− 1 45 43.35	3 3	"	"
S. D. −2 3552 K. .	7¼	99.28	12 34 42.390	− 2 30 40.06	3 3	"	"
C. D. 17624 . . .	9¼	1899.72	21 6 2.44	−29 45 9.9	1 1	Comet *c* 1899.	R. G. Aitken.
B. D. 25° 59 . . .	10	1899.75	0 23 17.96	+25 34 15.2	2 1	Thyra No. 115.	S. D. Townley.
25 64 . . .	9½	99.75	0 25 45.825	25 36 29.55	2 2		"
			R. A. 1900.0.	Decl. 1900.0.			
			h m s	° ′ ″			
B. D. 57° 750 . . .	9½	1900.05	3 43 32.335	+58 6 34.98	2 2	Orbit of	H. D. Curtis.
54 847 . . .	9	00.05	4 52 50.090	54 22 42.20	2 2	Comet 1898 VI.	"
S. D. −2° 3783 . .	9¼	1900.28	14 1 16.851	− 2 20 1.20	2 2	Comet IV 1895.	C. D. Perrine.
W. B. 134 . .	8¾	00.28	14 10 59.144	− 3 24 13.50	2 2	"	"
S. D. −10° 3923 . .	9½	1900.28	14 28 5.229	−10 12 7.92	2 2	Psyche No. 16.	S. D. Townley.
−10 3942 . .	9¾	00.28	14 36 8.264	−10 44 46.77	2 2	"	"
B. D. 4° 2377 . . .	8½	1900.32	10 39 23.10	+ 4 33 32.8	1 1	Heliometer meas.	Dr. Schur.
3 2419 . . .	9	00.32	10 43 22.36	+ 2 54 59.0	1 1		"
			R. A. 1901.0.	Decl. 1901.0.			
			h m s	° ′ ″			
31° 4676 . .	9¼	1901.84	22 14 3.88	+31 13 41.7	1 1	Orbit of Comet 1898 I.	H. D. Curtis.
39 4981 . .	(7.8)	01.84	22 54 3.22	39 15 46.4	1 1		
48 46 . .	9¼	01.84	0 9 12.37	48 33 45.6	1 1		
51 180 . .	9¼	01.84	0 48 30.73	51 35 46.3	1 1		
55 520 . .	9½	01.84	2 2 3.88	55 13 18.1	1 1		

LIST OF COMPARISON STARS FOR 1900.0.

No.	Mag.	R. A. 1900.0.	Decl. 1900.0.	Precessions 1900.0.	
		h m s	° ′ ″	s	″
000909	9¼	0 9 9.24	+48 33 25.6	+3.133	+20.04
002321	10	0 23 21.10	+25 34 35.1	3.138	19.95
002548	9½	0 25 48.970	+25 36 49.47	3.145	19.92
004827	9¼	0 48 27.30	+51 35 26.7	3.427	19.61
014705	9¼	1 47 5.359	+66 4 7.90	4.430	17.90
015951	8½	1 59 51.88	+78 28 50.2	6.350	17.37
020159	9½	2 1 59.83	+55 13 0.8	4.050	17.28
020538	9¼	2 5 38.43	+78 15 9.7	6.424	17.11
022231	7½	2 22 31.20	+77 13 9.3	6.506	16.30
022816	8½	2 28 16.121	+60 46 35.45	4.512	16.00
034332	9½	3 43 32.335	+58 6 34.98	4.851	11.25
045250	9	4 52 50.090	+54 22 42.20	4.859	5.79
062419	9¼	6 24 19.123	+51 17 40.80	4.731	− 2.12
062827	9	6 28 27.396	+50 29 44.01	4.682	2.48
063418	9½	6 34 18.108	+50 43 16.92	4.689	2.99
063420	9¼	6 34 20.998	+50 43 27.7	4.689	2.99
063444	9	6 34 44.734	+50 43 12.7	4.688	3.03
103923	8½	10 39 23.10	+ 4 33 32.8	3.109	18.82
104322	9	10 43 22.36	+ 2 54 59.0	3.095	18.94
121447	3.3	12 14 47.345	− 0 6 39.97	3.0739	20.01
122138	7½	12 21 38.815	+ 0 22 12.82	3.072	19.96
122238	7½	12 22 38.977	− 1 49 38.24	3.077	19.95
122656	7¾	12 26 56.849	− 1 13 17.13	3.076	19.91
122915	7	12 29 15.628	− 0 51 23.59	3.075	19.89
123157	7½	12 31 57.748	− 1 46 3.21	3.078	19.86
123445	7¼	12 34 45.472	− 2 30 59.88	3.082	19.82
140116	9¼	14 1 16.851	− 2 20 1.20	3.100	17.31
141059	8¾	14 10 59.144	− 3 24 13.50	3.116	16.86
142805	9½	14 28 5.229	−10 12 7.92	3.217	16.01
143608	9¼	14 36 8.264	−10 44 46.77	3.232	15.58
155012	8¼	15 50 12.63	−21 13 55.4	3.511	10.76
162428	8½	16 24 28.46	−25 15 3.4	3.649	8.12
171646	8.3	17 16 46.02	−20 7 42.2	3.554	3.76
195317	8½	19 53 17.62	−22 11 34.9	3.553	+ 9.51
203605	7¼	20 36 5.94	− 6 21 13.5	3.188	12.62
203835	8¼	20 38 35.44	− 6 18 50.6	3.187	12.79
204252	8	20 42 52.25	− 6 23 26.0	3.186	13.08
204324	9¼	20 43 24.98	− 6 18 19.5	3.184	13.12
204418	9½	20 44 18.25	− 6 20 0.3	3.185	13.17
210606	9¼	21 6 6.04	−29 44 55.3	3.598	14.55
212421	7	21 24 21.296	+11 31 2.92	2.902	15.60
212443	8¾	21 24 43.715	+11 15 9.75	2.906	15.62
212451	8½	21 24 51.564	+12 0 44.84	2.894	15.63
212519	7¼	21 25 19.397	+11 50 10.26	2.898	15.66
212618	6½	21 26 18.810	+11 41 52.31	2.901	15.71
221401	9¼	22 14 1.16	+31 13 23.8	2.711	17.94
225400	7.8	22 54 0.46	+39 15 27.2	2.762	19.23
225806	8¼	22 58 6.71	+39 21 15.6	2.780	19.33
225951	8¾	22 59 51.68	+39 24 31.79	2.788	19.37

PROPER MOTION STARS.

Star.	Obs.	Mag.	Epoch.	R. A. 1900.0.	Decl. 1900.0.	No.	Precessions.		Piazzi.
				h m s	° ′ ″		″ s	″	
γ Phoenix	. .	3	1898.87	1 24 1.397	−43 49 51.54	2 2	+2.6127	+18.719	94
γ Fornax	. .	5½	98.87	2 45 25.144	−24 58 17.60	2 2	2.6614	15.052	198
Lacl. 1060	. .	4	98.85	3 15 55.760	−43 27 11.47	2 2	2.1172	13.160	47
Lacl. 1326	. .	6½	99.11	3 58 13.037	−34 45 36.20	2 2	2.2732	10.161	. .
Lacl. 1737	. .	7	99.12	5 5 17.457	−41 20 59.11	2 2	1.9296	4.742	. .
Lacl. 2137	. .	6	99.11	6 1 35.763	−45 2 11.00	2 2	1.7343	− 0.140	346
Lacl. 2141	. .	6	99.14	6 1 47.592	−45 4 42.89	2 2	1.7322	0.156	348
Lacl. 2608	. .	5½	99.11	7 0 53.347	−43 28 10.99	2 2	1.8499	5.264	336
L. 2 Navis	. .	4½	99.13	7 10 29.170	−44 28 38.69	2 2	1.8216	6.070	55
3 Navis	. .	5¼	99.16	7 39 51.526	−44 54 12.31	2 2	1.8644	8.463	211
Lacl. 4212	. .	4½	99.29	10 10 32.265	−41 37 36.77	2 2	2.5266	17.808	29
Lacl. 4527	. .	5¼	99.18	10 52 3.424	−36 35 59.72	2 2	2.7827	19.177	199
Lacl. 4887	. .	6	99.29	11 41 45.055	−39 57 22.76	2 2	2.9836	19.989	. .
Lacl. 5319	. .	6	99.30	12 49 24.235	−43 36 13.26	2 2	3.3450	19.588	. .
Lacl. 6018	. .	6¼	1900.39	14 32 37.277	−46 8 44.22	2 2	3.9322	15.768	125
Lacl. 6443	. .	5½	00.40	15 31 18.918	−42 14 20.74	2 2	4.0399	12.115	113
η Sagit.	. .	4	1899.56	18 10 51.615	−36 47 29.86	2 2	4.0713	+ 0.950	17
Lacl. 9061	. .	6¼	98.80	22 8 32.024	−41 51 17.92	2 2	3.6325	17.726	18
Lacl. 9585	. .	7	99.76	23 41 14.854	−42 6 48.16	2 2	3.1715	19.985	. .
Lacl. 9640	. .	6¼	98.74	23 49 24.049	−40 51 27.47	2 2	3.1263	20.031	225

MERIDIAN CIRCLE OBSERVATIONS OF EROS.

Date. 1900.	Mag.	Gr. M. T.	App. R. A.	App. Decl.	log. f. p.
		h m s	h m s	° ′ ″	
Nov. 9	9¼	18 48 55.85	1 58 15.02	+54 21 27.24	0.4132$_n$
12	9¼	18 31 5.79	1 52 11.69	54 15 11.22	.4108$_n$
13	9	18 25 12.34	1 50 13.83	54 11 2.46	.4091$_n$
28	9¼	17 4 55.43	1 28 52.08	51 15 22.95	.3280$_n$
30	9	16 55 50.23	1 27 38.50	50 38 33.42	.3087$_n$
Dec. 3	9	16 43 2.67	1 26 38.52	49 39 3.34	.2729$_n$
4	. .	16 39 0.28	1 26 32.01	49 18 11.92	.2636$_n$
5	. .	16 35 4.57	1 26 32.21	48 56 52.46	.2502$_n$
7	9¼	16 27 32.73	1 26 52.26	48 12 58.87	.2223$_n$
10	9¼	16 17 3.80	1 28 11.28	47 4 19.25	.1749$_n$
11	9	16 13 47.02	1 28 50.52	46 40 48.03	.1572$_n$

The above observations, 11 in number, were reduced with the places of the Fundamental Stars for the first list of Reference Stars for Eros. They were first published in L. O. Bulletin No. 1.

MERIDIAN CIRCLE OBSERVATIONS OF NOVA PERSEI.

FUNDAMENTAL STARS. AUWERS' CORRECTED A. G. C.

Star.	Mag.	R. A. 1901.0.	Decl. 1901.0.	Proper Motion.	
		h m s	° ′ ″	s	″
α Persei . .	2.0	3 17 15.054	+49 30 32.13	+0.0011	−0.029
δ Persei . .	3.1	3 35 52.376	47 28 15.80	+ .0018	− .041
ϵ Persei . .	3.3	3 51 12.472	39 43 26.21	+ .0008	− .023

The corrections necessary to reduce the mean of these three stars, to Newcomb's Fundamental Catalogue, are: +0ˢ.021 and +0″.30.

NOVA PERSEI.

1901.			R. A. 1901.0.		Decl. West.	East.
			h m s		° ′ ″	″
Feb.	24	1	3 24 28.107		+43 33 53.91	. .
	25	1¼	28.059		54.40	. .
	26	1	28.033		53.35	. .
	27	1¾	28.134		54.51	. .
	28	1¾	28.068		53.56	54.54
Mar.	1	2	28.070		54.01	54.02
	2	2¼	28.105		53.81	53.39
	3	2½	28.113		54.67	54.24
1901.16			(8)	28.086	(8) 54.03	
			v	±.029	(4) (54.01)	54.05
					v ±0.38	±0.34
Nov.	12	7	28.122		53.96	. .
	13	7	28.149		54.05	. .
	18	7¼	28.157		53.74	54.01
	22	7½	28.128		53.92	54.27
1901.88			(4)	28.139	(4) 53.92	
			v	±.014	(2) (53.83)	54.14
					v ±0.09	±0.13

The magnitudes of the first series, above, are made up of the naked eye, and telescopic estimates, combined. The transits occurred in daylight, and the estimate was usually confirmed by a later view of Nova and neighboring stars.

The magnitudes of the later set are the telescopic estimates.

The difference between the observed Right Ascensions of the two sets, 0ˢ.053, corresponds very nearly to the difference due to the decline in brightness. The value previously determined here, to which reference has been made in this volume, is 0ˢ.028 for a difference of four magnitudes, or 0ˢ.007 per magnitude. There would be anticipated, accordingly, a difference of 0ˢ.04 in the observed Right Ascensions. The largest value of the first set, it will be noted, is below the mean of the second; and the later values are all above the mean of the first. There is no sensible change in position indicated in the interval of eight months.

During half of each series both the East and West circles were read for every observation, including those of the Fundamental stars, and the East circle was shifted in position each night. By weighting the mean of the East and West

determinations equally, there remains a difference of only 0".01 in Declination, between the two sets, and no sensible change of position is indicated.

The mean of the observations of the first series was first published in L. O. Bulletin No. 8. The results of the second series were announced at the meeting of the Astronomical and Astrophysical Society, in Washington, at the end of 1901.

MERIDIAN CIRCLE OBSERVATIONS OF COMETS.

Date.	Greenwich M. T.	App. R. A.	App. Decl.	
		Comet *b* 1897.		
1897.		h m s	° ′ ″	
Oct. 18	18.9011	3 22 5.51	70 7 11.2	
		Comet *c* 1898.		
1898.		h m s	° ′ ″	Weight.
June 13	13.7876	16 17 58.38	−26 33 3.3	3
14	14.7825	16 14 33.96	27 10 34.3	3
15	15.7774	16 11 7.46	27 48 3.9	1
16	16.7723	16 7 39.15	28 25 14.7	4
17	17.7671	16 4 9.32	29 2 9.2	5
18	18.7619	16 0 37.77	29 38 43.6	2
20	20.7516	15 53 33.18	30 50 37.8	4
22	22.7412	15 46 25.93	32 0 40.7	3
23	23.7359	15 42 52.60	32 34 50.9	4
24	24.7308	15 39 18.96	33 8 36.4	5
25	25.7256	15 35 46.54	33 41 39.2	3
27	27.7153	15 28 44.14	34 45 58.4	2
28	28.7101	15 25 14.67	35 17 7.4	4

THE INSTRUMENTAL CONSTANTS.

The following pages contain the essential details of the performance of the instrument, and the constants employed, during the period covered by this volume.

The mean result of the Flexure measures is contrary in sign to that derived in the years preceding, but the correction is very small: 0″.045 (±0″.02).

The value 48″.10 has been employed for the Declination Micrometer; and $3^s.210$, for the R. A. Micrometer.

The Runs Correction has been determined for periods of several months. The values for the mean of four microscopes are given below, for yearly periods.

The Thread Intervals have been determined by the transits of the Circumpolar stars. During the observations of the Additional Standard close Circumpolar stars, the reduction of each wire was determined, for each star, from the transits of that star alone; using the group of observations at each culmination separately. This process was simply to lessen the labor of computing. The reduction of each thread of every transit, to the center, has been carried out, to check the transit, and to call attention to any chronograph reading that might require to be scrutinized.

During the year 1896–97 transits were not observed, except for clock errors, and the record is confined to that of the circle reading at the Nadir. During the first two years, recorded below, three Nadirs were observed each night. During the later series, two were usually observed.

The Nadirs show some dependence upon temperature, low temperatures giving high circle readings, in general.

In the complete record by nights, the corrections for level and azimuth are given to two places of decimals, only, though in the reductions the third place was used. The record in this abbreviated form is more convenient for noting the changes. That of the level has an annual period, not immediately traceable to temperature changes. The azimuth varies irregularly, but the range is not great, $\pm 0^s.3$. The readings upon the Mire show the stability of its mounting; and indicate the errors which might have been made in azimuth correction, had this been derived from the Mire readings directly. The Mire has been mainly employed, as a check upon the azimuth, and its Rate. The Hourly Clock Rate is generally that of DENT Clock No. 4; but occasionally one of the two HÖHWU clocks, No. 3 or No. 8, has been used. The DENT clock has a temperature rate, very closely $+0^s.04$, in the correction, for $+1°$ change in temperature.

Instrumental Constants.

Determinations of Flexure and Declination Micrometer.

Date.	Circle.	f.	Temp.	Microm.
1896.		″	°	″
Aug. 6	E	−0.26	57	48.13
10	E	+ .02	79	.03
14	E	+ .04	79	.09
17	W	+ .03	76	
28	W	− .09	68	.16
Sep. 8	E	+ .16	75	.04
Dec. 9	E	− .25	65	.10
1897.				
Jan. 11	W	+ .04	50	.22
April 5	E	+ .07	52	.11
8	W	− .08	63	.12
May 13	W	− .17	72	.12
Sep. 2	E	− .04	60	.04
15	W	− .11	73	.10
28	W	− .25	62	.07
Nov. 8	E	− .08	44	.11
1898.				
Jan. 31	E	+ .10	41	.19
April 15	E	− .31	60	.14
May 7	W	+ .05	59	.16
21	W	− .03	46	.13
June 11	E	− .15	60	47.98
July 7	W	− .07	77	.15
Aug. 10	W	− .07	80	.10
20	E	− .04	64	.15
Dec. 17	E	+ .19	47	.18
1899.				
Dec. 27	W	− .23	56	.23
28	W	− .06	55	.17
1900.				
Aug. 27	W	+ .21	59	.04
31	W	+ .11	67	.16
Means,	E 13 =	−0.042		
	W 15 =	−0.048		
	28 =	−0.045	27 =	48.12
	v =	±0.11	v' =	± 0.05

Runs Correction.

		″		″
1896–1897	E	−.06	W	+.09
1897–1898		−.09		+.03
1898–1899		...		−.02
1899–1900		...		+.02
1900–1901		...		+.02

Values of Thread Intervals. Mean of Seven Threads. W.

			1897.			
s	s	s	s	s	s	s
+12.081	+4.109	+1.971	−0.061	−2.032	−4.024	−12.046
			1898.			
12.056	4.111	1.974	−0.072	2.017	4.025	12.026
			1899.			
12.071	4.039	1.978	−0.059	2.018	3.978	12.033
			1900.			
12.085	4.036	1.970	−0.060	2.010	3.984	12.036
			1901.			
12.067	4.027	1.969	−0.047	2.022	3.982	12.012

INSTRUMENTAL CONSTANTS.

Date.	Circle.	Nadir.	Temp.
1896.		″	°
Aug. 7	E	28.88	60
10	E	29.58	69
11	E	29.83	66
12	E	30.31	68
13	E	30.35	68
14	E	29.99	69
19	W	21.00	62
20	W	20.06	64
24	W	19.75	68
25	W	19.26	69
26	W	18.76	66
27	W	19.99	62
28	E	30.11	57
Sep. 1	E	27.98	62
3	E	27.98	67
7	E	28.68	66
9	E	29.74	58
10	E	29.38	59
16	W	20.61	57
23	W	19.66	55
25	W	18.85	63
28	W	20.58	60
29	W	21.51	62
Nov. 4	W	20.88	49
6	W	22.12	47
12	E	27.29	52
30	E	29.48	47
Dec. 2	E	30.04	56
8	E	29.05	55
9	E	29.01	55
19	W	21.24	55
21	W	22.44	52

Date.	Circle.	Nadir.	Temp.
1897.		″	°
Jan. 4	W	22.32	47
5	W	23.22	52
8	W	23.00	49
11	W	23.15	39
21	E	29.25	53
22	E	29.55	50
Feb. 24	E	28.61	47
25	E	28.72	50
Mar. 15	E	29.86	40
22	E	29.74	36
23	E	29.25	42
24	E	29.13	47
April 5	W	26.12	43
6	W	25.55	40
8	W	22.32	57
9	W	22.35	58
13	E	28.34	60
14	W	22.62	62
May 4	W	23.90	54
6	W	24.78	44
11	W	21.11	64
12	W	21.14	63
13	E	28.56	66
19	E	28.53	67
20	E	29.48	65
21	E	29.08	66
28	E	29.86	64
31	E	29.54	51
June 1	E	29.54	59
3	E	29.65	64

Month.	No.	Temp.
		°
August	13	65.2
September	10	60.9
November	4	48.7
December	5	54.6
January	6	48.3
February	2	48.5
March	4	41.2
April	6	53.3
May	10	60.4
June	2	61.5
Mean	62	56.8

Circle.	No.	Nadir.
		″
East	34	29.24
West	28	21.72

INSTRUMENTAL CONSTANTS.

Date.	Cir.	c.	t.	b.	a.	Mire.	Clock.	Nadir.	t.
1897.		s	°	s	s	s	s	″	°
Aug. 26	E	+.006	66						
31	E			−.37	+.02	0.98	−.010*	29.55	54
Sep. 1	E	+.010	60	−.39	+.03	1.00	−.030*	29.53	54
2	E	+.003	61						
8	E	+.010	58	−.35	+.08	.99	−.012*	29.08	49
9	E			−.35	+.12	.99	+.070	29.31	53
10	E	+.006	54						
10	W	−.006	54	−.42	+.12	1.00	+.070	19.51	51
13	W	−.013	61	−.41	+.05	1.00	+.080	19.37	54
14	W	−.010	65	−.39	+.11	.99	+.070	19.11	58
16	W	.000	76	−.38	+.17	.93	+.080	17.90	70
22	W			−.40	+.04	.94	+.080	18.06	67
23	W	+.013	74	−.40	+.07	.92	+.080	18.40	67
24	W	+.003	72						
27	W	−.010	56						
28	W			−.40	−.06	1.01	+.070	20.31	52
29	W	−.013	58	−.39	−.02	1.00	+.080	20.55	52
30	W	−.006	51						
30	E	+.010	51						

Date.	Cir.	c.	t.	b.	a.	Mire.	Clock.	Nadir.	t.
1897.		s	°	s	s	s	s	″	°
Oct. 4	E	+.016	66	−.32	+.22	0.98	+.060	27.57	64
7	E	+.010	58						
8	E			−.34	+.01	.98	+.054	29.33	51
11	E	+.013	67	−.32	+.06	.98	+.050	29.03	62
18	E	.000	63	−.32	+.04	.99	+.050	28.99	55
27	E	+.006	56						
28	E			−.33	+.01	.92	+.060	29.70	50
Nov. 1	E	+.013	67	−.34	−.01	.92	+.020	28.60	56
3	E			−.38	−.18	.92	+.030	29.79	43
4	E	+.019	46						
8	E	+.006	45	−.35	+.05	.96	+.020	29.11	43
10	W	.000	58	−.38	+.09	.91	+.010	20.32	55
12	W	−.010	61	−.42	−.03	.84	+.012	22.17	49
15	W			−.43	+.01	.89	+.012	21.49	48
16	W	.000	57	−.42	+.07	.90	+.020	21.20	51
17	W	−.010	57						
29	W	−.006	58						
Dec. 3	W			−.46	+.03	.82	+.020	22.16	43

*Höhwu Clock No. 3.

Weight on pendulum of No. 4 Clock: Nov. 1. Rate changed ¼″ daily. The Clock was cleaned Sept. 9.

Date.	Cir.	c.	t.	b.	a.	Mire.	Clock.	Nadir.	t.
1897.		s	°	s	s	s	s	"	°
Dec. 4	W	.000	46						
16	W			−.41	−.02	0.81	+.010	23.70	32
20	W			−.39	−.03	.83	.000	24.40	29
21	W	−.013	40	−.43	−.03	.91	.000	23.37	33
22	W	−.003	42						
22	E	+.013	42	−.43	−.01	.90	.000	29.04	36
23	E	+.013	42						
24	E			−.45	−.09	.92	.000	29.19	40
27	E	+.016	56	−.42	+.06	.86	.000	27.89	55
28	E	+.003	63	−.42	+.05	.81	+.066*	27.94	61
1898.									
Jan. 14	E	−.013	40						
26	E			−.52	−.07	.93	−.002	30.50	33
27	E	(−.038)	45	−.50	−.01	.94	−.006	29.41	38
28	E	−.013	38	−.53	−.04	.92	−.009	29.66	37
29	E	−.003	41						
Feb. 4	E	−.019	55	−.54	−.04	.89	−.003	28.45	49
9	W	+.003	47						
12	W			−.50	+.06	.81	−.002	22.45	48
14	W	.000	59	−.60	−.03	.92	+.003	21.69	61
15	W	−.003	59	−.55	−.10	.87	−.010	21.33	48
17	W	.000	40						
18	W			−.52	−.13	.89	−.001	24.09	34
Mar. 1	W	−.010	56	−.58	+.02	.86	.000	21.70	50
3	W			−.55	+.01	.83	−.003	21.97	48
4	W	+.006	53	−.56	−.03	.88	+.002	22.26	50
5	W	.000	55						
11	W			−.59	−.01	.85	+.003	22.01	51
12	W	+.006	51						
22	E			−.59	−.08	.88	−.005	29.45	34
23	E	+.016	39	−.55	+.05	.88	−.006	28.79	38
24	E	−.003	41						
30	E	+.006	55	−.53	−.04	.88	−.006	29.32	48
Mar. 31	E			−.53	−.11	.91	−.006	29.29	47
Apr. 1	E	+.003	42						
20	E			−.54	−.23	.86	+.004	31.33	40
21	E	+.019	50						
22	E	+.010	59	−.55	−.10	.95	+.005	28.91	54
25	E	+.013	68						
26	E			−.53	−.28	.99	+.007	29.35	59
27	E	+.006	61						
May 2	E			−.51	−.07	.97	+.002	28.88	50
3	E	−.010	56						
3	W	+.003	56	−.55	−.01	.91	−.004	21.54	52
4	W	−.003	56	−.56	−.08	.93	+.001	22.11	46
5	W	−.006	56	−.54	−.11	.94	+.002	22.07	43
6	W			−.55	−.10	.95	+.003	22.22	48
7	W	−.003	52						
9	W	+.006	70	−.58	−.10	.90	+.003	20.92	60
11	W	+.010	66	−.57	−.23	.84	+.006	22.52	55
19	W	−.013	51	−.50	−.02	.90	+.003	22.38	46
23	W			−.54	−.03	.96	−.002	22.33	51
24	W	−.006	59						

Date.	Cir.	c.	t.	b.	a.	Mire.	Clock.	Nadir.	t.
1898.		s	°	s	s	s	s	"	°
May 24	E	+.006	59	−.47	+.12	0.91	−.002	27.24	57
25	E	+.003	59	−.50	−.09	.96	−.002	29.15	47
28	E	+.010	41	−.48	−.05	.85	−.004	29.20	40
30	E	+.013	44	−.51	−.08	.93	−.002	29.08	43
June 6	E			−.47	−.10	.90	+.002	29.78	64
7	E	+.003	71	−.47	−.13	.92	+.004	29.52	64
8	E	+.010	70	−.48	−.20	.95	+.004	29.92	62
9	E	+.003	70	−.49	−.16	.92	.000	29.82	61
10	E	+.006	67						
17	E	+.019	75	−.48	+.09	.95	+.003	27.70	65
18	E	+.016	70						
20	E			−.50	−.08	.95	+.003	29.58	61
21	E	+.003	70						
22	E			−.50	−.27	.91	+.003	30.66	51
23	E	+.006	61	−.49	−.01	.96	+.003	28.30	62
24	E	+.016	74						
24	W	+.010	74	−.53	+.20	.90	+.001	18.70	72
27	W	+.010	74	−.52	−.14	.90	+.006	19.69	66
28	W	.000	80	−.51	−.10	.93	+.015	19.08	68
29	W	−.003	78	−.53	−.15	.95	+.015	19.74	65
30	W			−.57	−.30	.98	+.015	20.87	62
July 1	W	−.003	65	−.56	−.12	.97	+.015	19.56	70
2	W	−.003	77						
4	W			−.55	−.15	.96	+.015	20.05	66
5	W	−.013	73	−.54	−.13	.95	+.018	20.24	65
6	W	−.003	74						

Means.		c	Mire.
44 det.	E	+.007	0.92
41 det.	W	−.003	80 det.

Date.	Cir.	c.	t.	b.	a.	Mire.	Clock.	Nadir.	t.
Sep. 5	W	−.010	74						
6				−.38	+.18	0.96	+.020	18.02	70
7				−.40	.00	.98	+.030	19.08	65
13		−.026	72	−.41	−.19	1.01	+.024	19.95	61
14				−.42	−.17	1.04	+.030	19.48	64
15		−.026	76	−.41	+.03	1.00	+.024	18.33	68
16				−.41	+.08	.96	+.026	17.91	72
19		−.010	69	−.38	−.04	.93	+.027	19.13	58
20				−.39	.00	.92	+.030	20.02	57
23		−.003	62	−.33	+.15	.92	+.020	19.04	50
28				−.29	+.24	.98	+.010	19.72	51
29				−.33	+.18	1.02	+.016	19.89	52
Oct. 4				−.26	+.25	.96	+.006	21.18	46
5		−.016	52	−.26	+.31	.98	+.005	20.66	49
12				−.34	+.15	1.00	+.010	20.58	62
13		−.016	67	−.34	+.19	.99	+.006	19.73	65
17		+.006	68	−.36	+.11	.91	.000	20.17	65
18				−.36	+.03	.92	.000	20.65	61
19				−.40	−.07	1.00	+.010	20.94	65
20		−.010	67	−.40	−.03	1.00	+.010	20.06	64
25		+.003	66	−.38	+.09	.94	+.020	20.00	59
26				−.37	+.08	.90	+.020	20.43	60
27		+.003	65	−.37	.00	.94	+.020	20.82	62

*Höhwu Clock No. 8.

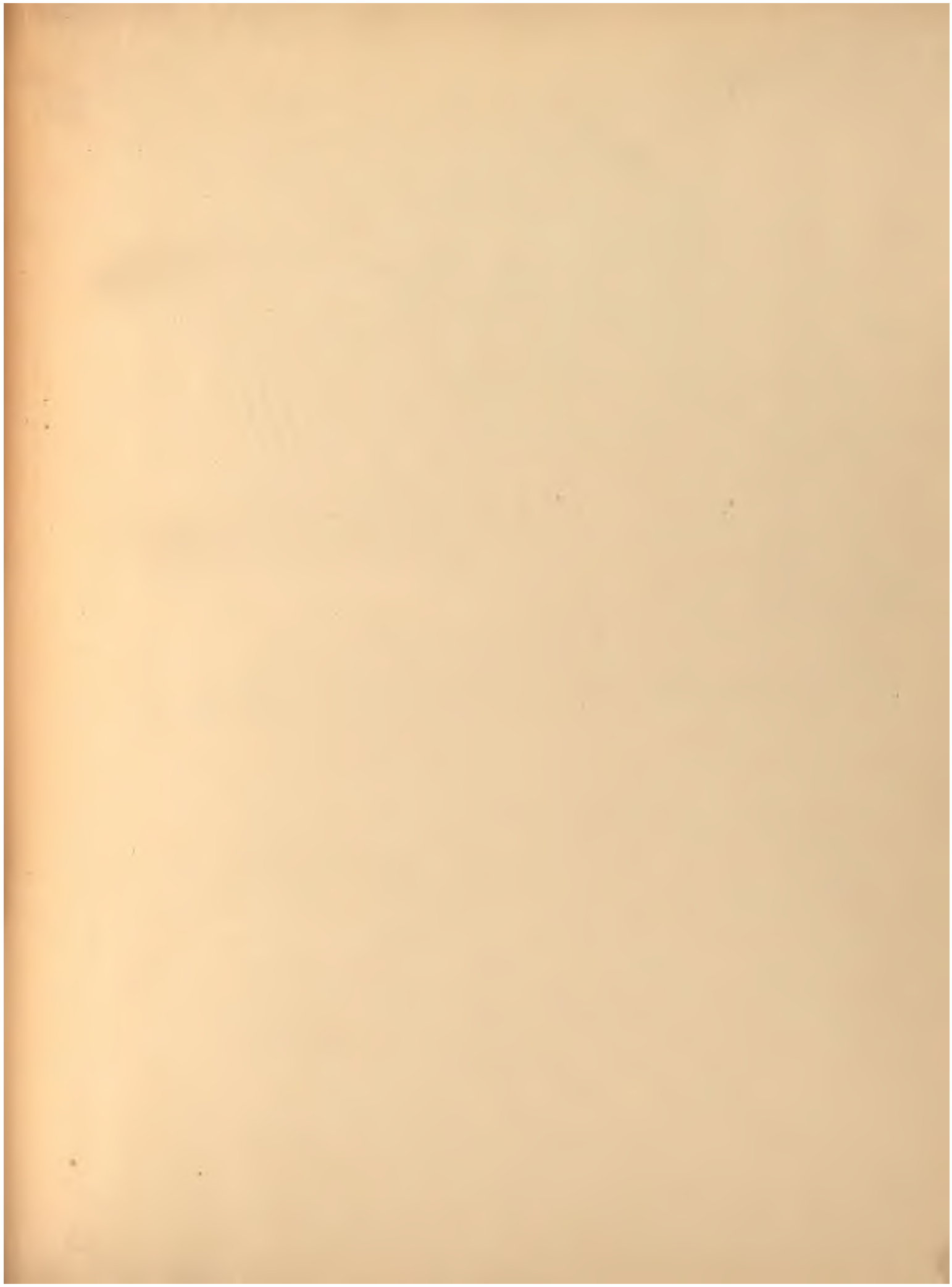
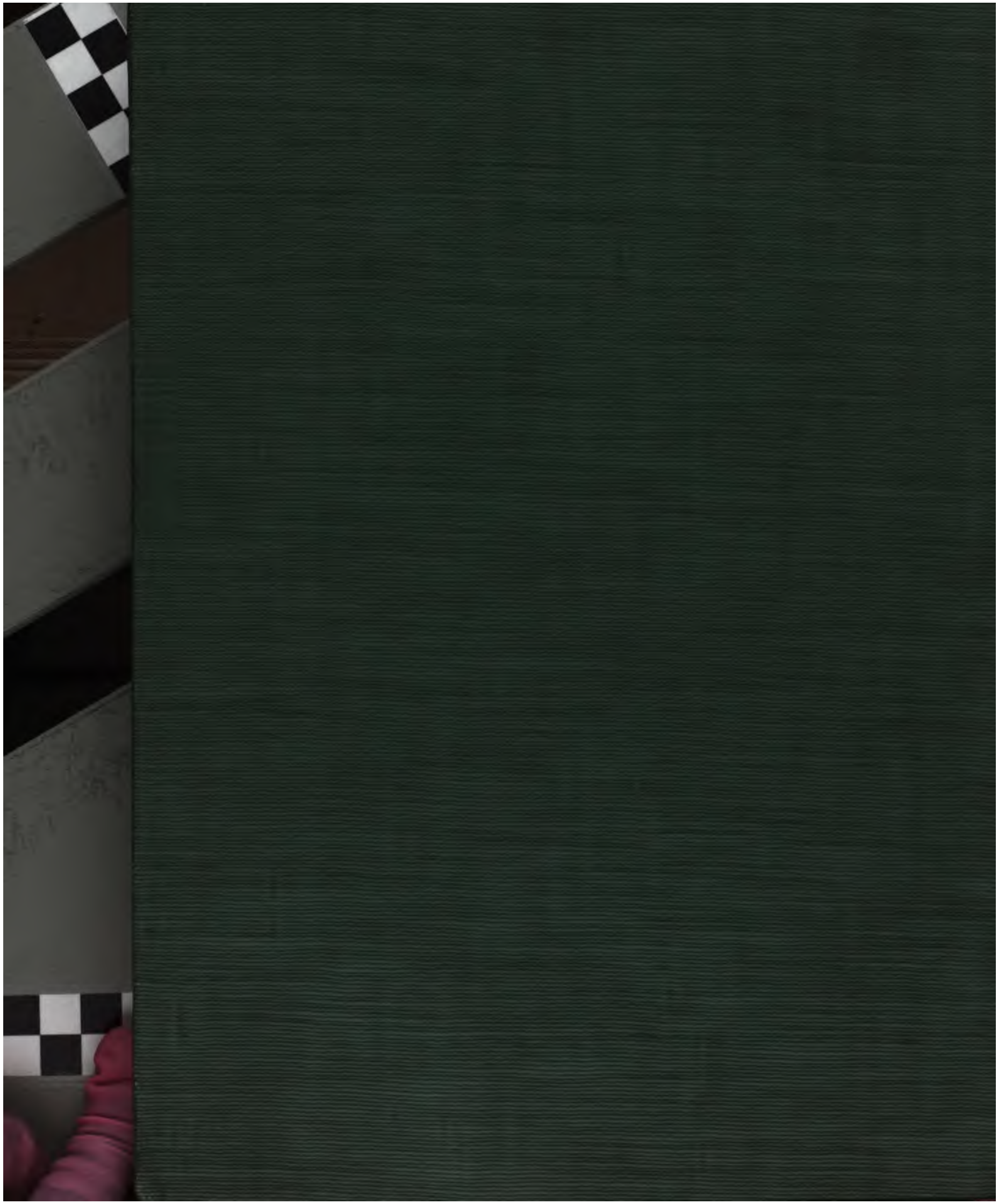
Earthquake at $12^h\ 11^m\ 0^s = 11^h\ 42^m\ 45^s$ P. S. T. March 30, 1898. Stopped the Clock in observing room (pendulum N. & S.); and No. 8 Höhwu (pendulum N. & S.).

Date. 1898.	Cir.	c. s	t. °	b. s	a. s	Mire. s	Clock. s	Nadir. ″	t. °
Nov. 1	W	−.013	52	−.40	−.10	0.93	+.020	21.95	62
3				−.36	+.02	.91	+.020	21.29	51
7		−.019	45						
9				−.38	−.05	.97	+.010	21.83	50
10				−.38	−.08	.95	+.010	22.49	43
14		−.003	62	−.34	+.03	.88	+.005	20.88	51
15				−.36	−.06	.94	+.005	21.41	50
16				−.34	−.02	.94	+.010	20.91	49
17		−.010	56						
25				−.33	+.09	.93	+.010	22.79	40
26		.000	45						
28				−.35	+.09	.90	−.002	22.84	47
30				−.37	−.05	.93	.000	24.00	40
Dec. 1		−.003	44	−.40	+.01	.93	−.003	23.39	47
2				−.40	+.06	.90	−.004	22.62	54
3		−.006	58						
9		+.006	35	−.43	−.20	.81	−.002	24.72	31
12				−.40	+.01	.83	−.002	23.05	43
15				−.37	−.03	.86	−.010	23.84	40
16		+.003	46	−.37	+.06	.86	−.005	22.67	43
22		−.005	46	−.44	+.02	.92	−.004	23.10	46
23				−.44	+.03	.93	.000	22.62	45
27				−.43	−.01	.92	.000	21.72	56
28		−.010	48						
30				−.38	−.13	.83	−.002	25.03	28
1899.									
Jan. 20				−.52	+.12	.87	−.004	22.98	53
21		+.005	54						
23		+.005	56	−.55	+.02	.90	−.020	22.80	48
26				−.55	−.02	.91	−.010	22.55	57
27		−.003	61	−.54	+.01	.89	.000	21.61	56
28				−.55	−.06	.87	+.001	21.97	55
30				−.57	−.14	.91	+.002	23.02	50
Feb. 6				−.45	+.09	.87	−.001	24.59	30
7		+.006	40	−.44	+.15	.90	−.006	23.29	41
8				−.49	+.12	.92	−.010	22.68	47
9		+.010	49	−.49	+.07	.89	−.012	22.46	46
10				−.49	+.03	.86	−.010	22.73	48
13		−.013	50	−.57	−.13	.97	−.020	23.62	46
14				−.57	−.09	.98	−.010	23.06	47
15				−.59	−.10	.91	−.005	23.86	44
16		−.010	52	−.58	−.08	.93	.000	22.65	50
20				−.58	−.10	.88	−.001	22.99	50
21				−.59	−.12	.94	−.010	22.91	51
22				−.58	−.08	.89	+.004	22.94	51
23		−.006	51						
24				−.60	−.20	.93	+.004	24.84	33
25		−.013	40						
Mar. 3				−.50	+.06	.85	−.005	24.05	40
4		.000	51	−.50	+.08	.93	−.010	22.33	50
6				−.53	+.11	.91	−.006	22.37	56
7		+.003	57	−.52	−.09	.87	−.006	23.76	44
10				−.57	−.11	.89	−.006	25.24	32
11				−.52	.00	.91	−.006	23.69	34
27				−.52	+.15	.82	−.010	21.94	46
Apr. 3				−.52	+.18	.83	−.020	22.53	51

Date. 1899.	Cir.	c. s	t. °	b. s	a. s	Mire. s	Clock. s	Nadir. ″	t. °
Apr. 4	W			−.56	+.16	0.85	−.010	22.41	52
5		+.010	58	−.60	+.12	.86	−.006	22.36	53
6				−.61	+.20	.86	−.003	21.15	60
7		.000	69	−.64	+.14	.89	−.001	21.04	61
10		+.017	61	−.67	−.01	.90	.000	23.41	54
12				−.62	−.03	.87	.000	23.44	47
13		+.010	58	−.63	+.02	.90	.000	23.19	53
14				−.62	+.05	.91	−.010	22.02	58
17				−.61	−.07	.90	.000	23.85	38
18		−.008	46	−.63	−.05	.93	.000	24.95	42
19				−.61	+.08	.94	−.002	22.77	58
20		+.006	70	−.60	+.12	.94	−.010	21.92	59
28				−.57	+.01	.88	−.003	24.61	38
29				−.57	+.06	.93	.000	23.26	37
May 2				−.58	+.04	.94	−.015	23.36	40
3		−.005	49						
4				−.54	+.13	.88	−.030	22.93	41
5				−.54	+.04	.91	−.020	23.86	39
July 14		−.016	78	−.54	−.06	1.01	+.020	20.13	68
17				−.55	+.02	1.00	+.020	19.92	77
18				−.56	−.07	1.05	+.020	19.88	78
19		−.035	87						
20				−.56	−.34	1.10	+.020	22.00	65
21				−.56	−.31	.99	+.020	21.43	63
22		−.026	77						
24				−.53	−.06	1.04	.000	19.61	72
25				−.55	−.12	1.01	+.010	20.38	67
26		−.023	77						
27				−.52	−.09	1.02	+.020	19.83	67
31				−.52	−.09	1.04	+.010	20.39	64
Aug. 1		−.023	75	−.49	−.04	1.02	+.010	18.57	63
7		−.006	69	−.44	+.13	.95	+.010	19.46	58
8				−.45	+.15	.93	+.010	19.70	60
9				−.44	+.12	.95	+.004	19.90	62
10		+.006	70	−.44	+.15	.94	+.004	20.25	60
14				−.42	+.14	.93	+.006	20.56	52
15		+.005	66	−.42	+.18	.92	+.010	21.02	55
18				−.35	+.21	.95	.000	20.46	55
21		+.003	54	−.41	+.11	.98	−.010	20.90	55
22				−.38	+.23	.96	+.002	20.07	62
24		−.003	71	−.39	+.16	.97	+.002	20.58	59
25				−.39	+.08	.95	+.006	20.79	60
28		−.010	70						
Sep. 4		−.003	58	−.40	+.06	.90	+.010	21.25	48
5				−.44	+.07	.99	+.010	21.74	54
6				−.42	+.11	1.01	+.006	21.17	59
7				−.39	+.17	1.00	+.006	20.36	63
11				−.41	+.05	.98	+.010	19.89	75
12		.000	81	−.43	−.04	.99	+.010	20.39	74
14				−.45	−.14	1.00	+.020	21.38	64
15		.000	71	−.46	−.08	1.02	+.020	20.67	67
18				−.43	+.05	.97	+.020	19.43	74
19				−.42	+.02	.98	+.030	19.02	76
25		−.010	85						
26				−.43	−.13	.98	+.024	19.55	73
Oct. 4		−.003	68						

Date. 1900.	Cir.	c.	t.	b.	a.	Mire.	Clock.	Nadir.	t.
		s	°	s	s	s	s	″	°
Jan. 10	W	+.010	52	−.47	+.17	0.82	−.020	22.49	55
11				−.45	+.14	.83	−.020	22.69	51
12				−.48	+.10	.84	−.030	22.56	54
16				−.51	+.05	.87	−.020	23.44	50
17				−.49	+.13	.86	−.030	22.09	56
18				−.49	+.08	.85	−.030	23.42	53
19				−.49	+.02	.86	−.020	23.64	48
22				−.49	+.03	.86	−.030	23.40	45
25				−.48	−.02	.85	−.020	23.28	47
26				−.48	−.01	.88	−.020	23.71	44
31				−.45	+.02	.90	−.020	23.52	44
Feb. 9				−.44	+.09	. .	−.030	. .	42
16				−.49	+.07	.86	−.030	22.85	50
17		+.006	54						
Apr. 9		+.006	45	−.52	+.05	.90	−.060	23.58	38
16				−.49	+.13	.88	−.030	24.02	54
17				−.51	+.10	.89	−.030	23.61	56
18				−.50	+.04	.87	−.030	23.72	52
24		+.006	57						
27				−.53	+.07	.81	−.030	25.41	46
May 7				−.44	+.10	.83	−.030	24.60	47
8				−.46	+.15	.85	−.020	23.60	53
9		−.038	60						
14		−.013	60	−.43	+.19	.87	−.030	23.42	57
15				−.49	+.12	.91	−.010	24.06	52
16				−.52	+.05	.92	−.030	23.96	51
17		−.019	62	−.52	+.05	.93	−.020	23.70	57
18				−.53	−.03	.92	−.020	23.99	52
21		.000	70	−.51	−.05	.93	−.024	22.80	61
22				−.54	−.16	.90	−.020	24.14	54
24				−.56	−.11	.90	−.020	25.00	51
25		+.006	61	−.50	−.07	.93	−.015	23.34	48
28		−.013	60	−.53	−.04	.95	−.015	23.67	56
29				−.49	−.03	1.01	−.015	22.74	57
30				−.49	.00	.92	−.020	23.03	61
31		.000	73	−.51	−.01	.90	−.015	23.18	60
June 4				−.49	+.01	.91	−.010	21.99	65
5		−.006	78	−.48	+.09	.88	−.010	21.27	72
11		+.003	71						
17				−.46	+.15	.92	−.012	21.84	57
18				−.42	+.15	.91	−.012	21.16	57
19		+.006	71	−.45	+.10	.94	−.010	21.23	61
20				−.47	+.13	.91	−.012	21.53	63
23				−.47	+.04	.94	−.010	22.01	57
24				−.48	−.02	.94	−.010	21.97	56
25				−.47	+.04	.89	.000	22.32	55
26		+.006	72	−.49	+.08	.97	.000	21.31	67
27				−.45	.00	.95	−.002	20.88	64
28		+.008	74	−.43	−.03	.96	−.001	20.71	66
29				−.43	−.14	.95	−.002	21.78	62
July 2				−.44	−.07	.92	−.003	21.55	55
3				−.45	+.03	.94	+.001	21.24	61
5				−.47	.00	.99	+.002	20.55	67
July 6	W			−.45	+.07	0.95	+.002	19.28	71
9				−.48	−.06	1.06	+.001	20.14	72
10				−.46	−.12	.99	+.004	19.35	71
11				−.47	−.09	.96	+.006	19.28	74
12		−.013	82						
Sep. 1		−.010	72						
3				−.38	+.07	1.03	−.010	20.35	56
17		−.003	58	−.33	+.27	.94	−.020	20.48	54
18				−.36	+.27	.99	−.036	20.28	60
19				−.33	+.22	.96	−.033	20.37	60
20				−.37	+.11	. .	−.010	21.68	58
21				−.34	+.14	.95	−.002	19.88	67
24				−.41	−.11	.98	+.004	23.33	47
25				−.40	.00	1.01	+.010	22.61	49
26				−.39	+.03	1.01	+.010	22.52	53
27				−.36	+.13	.92	.000	21.75	56
28		−.006	69	−.35	+.13	.96	+.010	20.95	60
Oct. 1				−.32	−.21	.97	+.010	24.95	37
8		−.010	71	−.36	+.22	.98	+.010	20.28	65
9				−.39	+.16	.97	+.020	20.24	63
10				−.37	+.06	. .	+.020	22.08	58
12				−.36	+.08	. .	+.020	22.30	52
15				−.37	+.15	.93	+.020	21.23	60
16				−.37	+.16	.96	+.030	20.99	61
17		−.003	68						
20				−.38	+.08	.96	+.030	21.90	52
22				−.36	+.13	.89	+.030	22.84	46
23		.000	52	−.37	+.09	.90	+.030	22.70	40
24				−.36	+.05	.92	+.020	23.14	44
25				−.34	+.11	.96	+.020	22.18	49
26				−.33	+.13	.94	+.012	22.33	51
29		+.013	39	−.32	+.02	.93	+.015	24.02	38
Nov. 1				−.26	+.17	1.01	+.015	21.61	51
2		−.006	63	−.31	+.23	.94	+.015	20.81	57
5				−.35	+.07	.93	+.015	21.44	59
8				−.37	.00	. .	+.015	22.79	52
9				−.38	+.10	.95	+.015	22.26	55
12				−.36	+.02	.99	+.020	21.40	64
13				−.36	−.02	.96	+.020	22.01	59
14		−.023	62						
23				−.30	+.16	. .	.000	20.79	50
26				−.34	.00	. .	+.006	22.54	44
27		+.006	60	−.38	+.20	.88	+.010	20.74	54
28				−.38	+.11	.88	+.005	22.08	54
30				−.40	.00	.94	+.005	22.38	52
Dec. 3				−.42	−.10	.97	+.006	21.98	60
4		−.006	59	−.42	−.14	.93	+.008	21.49	57
5				−.43	−.04	.89	+.005	21.16	61
7				−.41	−.06	.89	+.010	20.25	57
10				−.37	−.11	.91	+.030	23.03	46
11				−.37	−.03	.94	+.010	22.42	47
12				−.35	+.01	.90	+.010	22.18	46
13		+.010	57						

January 19. Vibration of the mercury, lasting ¼ hour. Due to the earthquake at Colima, Mexico.
September 20 A. M. Removed weight from pendulum of Dent Clock No. 4: Change of rate, 0s.7 daily.

Date.	Cir.	c.	t.	b.	a.	Mire.	Clock.	Nadir.	t.
1900.		s	°	s	s	s	s	″	°
Dec. 24	W			−.37	+.16	0.86	+.020	22.08	47
26				−.42	+.04	.88	+.010	22.96	47
28		+.016	47	−.41	+.04	.88	+.010	22.92	43
31				−.40	−.07	.87	−.002	26.17	24
1901.									
Jan. 15				−.48	+.04	.90	−.010	24.12	46
16		.000	59	−.47	+.19	.91	.000	21.04	52
18				−.50	+.05	.88	−.002	23.32	46
23				−.42	+.12	.84	+.010	22.57	42
25				−.42	+.03	.79	.000	24.78	34

Date.	Cir.	c.	t.	b.	a.	Mire.	Clock.	Nadir.	t.
1901.		s	°	s	s	s	s	″	°
Jan. 28	W			−.48	+.03	0.89	−.005	24.80	39
29		+.006	44	−.50	+.03	.90	−.006	24.02	43
Feb. 24				−.50	.00	.90	−.010	23.98	48
25				−.51	+.08	.89	−.010	21.71	54
26				−.51	+.10	..	−.006	21.46	56
27				−.53	+.06	.92	−.002	22.42	57
28				−.54	+.08	.93	−.006	21.91	60
Mar. 1				−.53	+.14	.88	−.004	21.95	60
2				−.62	−.09	..	−.003	25.45	48
3				−.59	−.02	.92	−.003	23.00	54